First-line vs Second-line Antibiotics for Treatment of Sinusitis

To the Editor: Dr Piccirillo and colleagues found that second-line antibiotics were no more effective than first-line antibiotics in the treatment of acute rhinosinusitis, although they were associated with significantly higher costs. However, we believe that these conclusions are not justified due to inadequate study design.

First, this was a retrospective study of adults in a proprietary database with a diagnosis code of acute rhinosinusitis and a concurrent prescription for antibiotics. No diagnostic standard or chart review was used. Other studies of similar unselected patient populations have shown that 50% or more of patients with a presumed diagnosis of bacterial sinusitis actually have a viral infection and should not be treated with antibiotics.

Second, the authors defined therapeutic success as the absence of a claim for a second antibiotic within 28 days. Appropriate antibiotic therapy has been shown to provide quicker resolution of symptoms than placebo in bacterial rhinosinusitis. Time to resolution of symptoms, however, was not determined in this study.

Third, the results could be biased if patients with more severe symptoms received broader-spectrum antibiotics. The authors attempted to adjust for such bias with propensity scores. This showed that the data had no ability to detect any treatment bias between groups prescribed first-line vs second-line antibiotics, as evidenced by a c statistic of 0.552. This means that there was either no bias or that the data needed to account for bias was not used. The data needed could be symptom severity or reclassification of antibiotics assigned to each treatment group.

Finally, the authors developed an arbitrary antibiotic classification system, based mainly on cost without regard to spectrum of activity or incidence of antimicrobial resistance. This is inconsistent with current clinical rhinosinusitis guidelines developed by academic and professional medical organizations. By grouping together drugs with vastly different spectra, the analysis of outcomes becomes meaningless.

If the authors’ conclusions were followed, many second-line antibiotics that are highly effective in this era of bacterial resistance would be underused, resulting in higher failure rates in true cases of bacterial rhinosinusitis. We believe that a better approach would be to prescribe effective antibiotics to patients meeting defined clinical criteria. Studies that examine cost-effectiveness and therapeutic equivalency in the treatment of acute bacterial rhinosinusitis are urgently needed.

Jack B. Anon, MD
University of Pittsburgh School of Medicine
Pittsburgh, Pa

©2002 American Medical Association. All rights reserved.
tice to initiate antimicrobial therapy for presumed sinusitis without confirmation from radiological or microbiological studies. Time to resolution of symptoms is but one of many reasonable outcomes to select for the definition of treatment response in sinusitis. We selected the absence of a claim for a second antibiotic within 28 days as our primary outcome measure. This outcome is clinically reasonable and has been used in other studies using pharmacy and administrative databases.\(^1\) We agree that the failure to define severity of disease was a limitation of our study. However, given the particular subset of patients with sinusitis in our study, we believe this was a minor limitation. For example, the Sinus and Allergy Health Partnership (SAHP)\(^2\) antibiotic treatment guidelines for patients similar to ours—that with acute sinusitis and no antibiotic use in the prior 4 to 6 weeks—make no distinction in recommended antibiotics based on symptom severity. The SAHP-recommended antibiotics are amoxicillin, amoxicillin/clavulanate potassium, cefpodoxime proxetil, and cefuroxime axetil.

The choice to classify antibiotics into first-line and second-line was not arbitrary nor was it based on cost. We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) To demonstrate that our conclusions are not arbitrary nor was it based on cost. We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.\(^3\,5\) We decided to classify antibiotics to simplify the analysis and presentation of results and we used a classification system that was used in other studies.
tween moderately high retinol intake and possible adverse effects on bone health remains inconclusive.

John N. Hathcock, PhD
Council for Responsible Nutrition
Washington, DC


In Reply: We agree with Dr Hathcock that dietary guidance must be based on collected evidence from various scientific sources. With this in mind, we analyzed data from the Nurses’ Health Study after a Swedish study reported that retinol intake was positively associated with risk of hip fracture and inversely associated with femoral bone mineral density in women.1 Our finding of a significant increase in risk of hip fracture with higher retinol intakes in postmenopausal women was very similar to that observed in the Swedish study. Although we recognize the inherent limitations of observational research, laboratory data come with their own strengths and weaknesses. An analysis of data from NHANES III showed no association between serum retinyl esters and bone mineral density,2 although this finding is difficult to interpret because there was a single measurement of blood retinyl esters without evidence that this reflects long-term retinol intake. Also, although bone mineral density is a major factor in osteoporotic fracture, it is not synonymous with fracture, which is the outcome of public health concern. The small Icelandic study that Hathcock cites3 also assessed bone mineral density rather than fracture and did not control for vitamin D intake, which confounds the observed effects of retinol.

Without absolute certainty about whether higher retinol intakes within the range consumed by the US population can lead to bone loss and fracture with long-term intake, and in a situation such as this, where a randomized trial is unlikely to be done, we believe that the principle of reasonable certainty of no harm is appropriate. That is, because we cannot be certain that retinol intake of approximately 1500 µg/d [5000 IU/d] is without adverse consequences, we recommend judicious supplementation and fortification with vitamin A. Retinol levels in multivitamins and processed foods can easily be lowered or partially replaced with beta carotene without risk of deficiency. This would be facilitated by a lowering of the US

©2002 American Medical Association. All rights reserved.

Meningiomas in Women With Lymphangioleiomyomatosis

To the Editor: Dr Moss and colleagues1 found that among 250 women with lymphangioleiomyomatosis (LAM) who received screening magnetic resonance imaging (MRI), 8 were found to have meningiomas. Although Moss et al divided these 8 patients into 3 groups—normal neurologic findings (6 patients), “sensorimotor abnormalities” (1 patient), and “local neurologic abnormality (1 patient)” — these clinical terms were not clearly described. It is uncertain whether these symptoms were related to the meningiomas or perhaps to some other cause. No imaging characteristics of the lesions were described, except that 2 patients had multiple meningiomas.

The authors contrast their observed rate of meningioma of 3.2% with a frequency of 0.005% in the general population. However, this latter figure apparently refers to the prevalence of symptomatic meningiomas. Asymptomatic meningiomas are incidental findings in as many as 1.4% of autopsies.2 Since none of the women were clearly symptomatic from their lesions, their frequency of meningiomas in this study is only about twice that observed in the general population.2

Moss et al speculate on the possible role of progesterone in the formation or progression of meningiomas. Preliminary data from their study are “not consistent with a beneficial effect of progesterone analogues in LAM.” Because no further details are provided, the evidence on which this statement is based cannot be assessed. It is thus inappropriate to assert that progesterone is of no benefit in LAM. They go on to state that “it appears prudent for patients with LAM and meningiomas to avoid progesterone therapy. LAM is a relentlessly progressive, fatal disease. Meningiomas, on the other hand, are typically benign lesions that do not produce clinical symptoms. Symptoms relate either to mass effect from larger lesions or the
LETTERS

presence of a more aggressive tumor. Although progesterone antagonists have been used in the treatment of meningioma, surgery is generally preferable because it is curative.

It is also possible that a similar proportion of women receiving progesterone for other indications would have asymptomatic meningiomas. Finally, while it is not known if progesterone therapy is beneficial for LAM, the development of a generally benign, asymptomatic cerebral lesion does not contraindicate its use in this fatal disorder.

David Neal Franz, MD
Departments of Pediatrics and Neurology
Children’s Hospital Medical Center
Cincinnati, Ohio


In Reply: Dr Franz notes that our finding of 8 patients with meningiomas among patients with LAM is not remarkable because it is not much greater than the rate of 1.4% found at autopsy. Because the incidence of meningiomas increases with age, comparison with an autopsy series is not valid. In fact, in 1000 healthy volunteers similar in age to our population and studied with MRI, none was found to have a meningioma, consistent with an age-dependent increase in incidence. As an update, since publication of our article a ninth patient in the series of 250 has been diagnosed as having meningioma. We stand by our original conclusions that the incidence of meningiomas in LAM is much greater than expected.

Franz disagrees with our statement that “it appears prudent for patients with LAM and meningiomas to avoid progesterone therapy. His description of LAM as a “relentlessly progressive, fatal disease” reflects a misconception regarding this illness. Indeed, LAM is often diagnosed late in its course, when lung destruction is significant. Although its course is highly variable, based on our series, which includes more than half of the diagnosed patients in the United States, LAM is a chronic disease that often evolves over decades. Given these facts, in patients with LAM and meningiomas, the use of progesterone, which has no proven benefit in LAM but has known growth-enhancing effects on meningiomas, is not reasonable. We stand by our conclusion based on the premise that progesterone therapy in this case is not beneficial. Finally, Franz’s statement regarding continued use of progesterone assumes that a therapeutic efficacy in LAM has not been established. We are currently studying this issue. We see no reason to give patients this agent that enhances the growth of this tumor and has no other known values in this disease.

Joel Moss, MD, PhD
Rosamma DeCastro, MSN, CRNP
Angelo Taveira-DaSilva, MD, PhD
Pulmonary-Critical Care Medicine Branch
National Heart, Lung, and Blood Institute
National Institutes of Health

Nicolas J. Patronas, MD
Department of Diagnostic Radiology
National Institutes of Health
Bethesda, Md


Partnerships Between Universities and Industry

To the Editor: Drs Gelijns and Thier argue that the relationship between university and industry should be reconsidered by “balancing risks against benefits” and then, in an apparent contradiction, urge university and industry “to maximize the upsides of collaboration and minimize the downsides,” a premise they adopt by disregarding several substantive conflicts of interest. For example, the past decade has seen a growing number of university presidents and medical leaders who accept appointments to health-related corporate boards of directors, thus assuming fiduciary responsibilities on behalf of their stockholders. This role is in direct conflict with student and patient welfare and the overall mission of the university, not to mention the message it sends to faculty, researchers, and physicians. Angel1 asks, “How can they [academic medical institutions] justify rigorous conflict-of-interest policies for individual researchers when their own ties are so extensive?” She also warns, “The incentives of the market-place should not become woven into the fabric of academic medicine.”

Researchers and medical leaders confront a similar conflict in accepting stock options for consultancies and positions on corporate science advisory boards. Another conflict arises when scientists retain their faculty status yet take their inventions off campus, establish a for-profit entity, or assume a leadership role. These “moonlighting” arrangements should be prohibited by institutions receiving taxpayer support.

A study found that more than half of the members on the US Food and Drug Administration (FDA) advisory committees “have financial relationships with pharmaceutical companies that have an interest in FDA decisions.” This problem is underscored by a congressional committee report documenting regular violations of the Federal Advisory Committee Act in FDA and Centers for Disease Control and Prevention vaccine policy advisory committees, including numerous member conflicts of interest.

Dr Thier’s affiliations on 3 health-related corporate boards of directors reflects his opinion favoring greater collaboration. The disclaimer “none of which have financial interests in this article” belies the fact that these institutions may have interdependent relationships with other corporations that have a direct stake in developing close ties to academic research in—

©2002 American Medical Association. All rights reserved.
stitions. These and other conflicts are symptomatic of a problem that can only lead to a complete metastatic ethical meltdown.

Lynn H. Ehrle, MEd
Cancer Prevention Coalition
Plymouth, Mich

To the Editor: Drs Gelijns and Thier discuss the role of patents in the university-industry relationship. The goal of a patent is to define and protect a particular item of intellectual property and limit its use by others. A patent’s legal validity requires secrecy prior to filing the patent application. Universities exist to collect knowledge, objectively evaluate it, and make it available to students and society. The open flow of information and collaboration among colleagues is a fundamental feature of university life. The distinctly separate priorities of academic life and patent law are inherently incompatible.

Because of their traditional role in transferring knowledge, universities enjoy unique benefits, including direct support from government and tax deductible contributions. This position would be undermined to the extent that academic institutions transform themselves into hybrid entities whose concerns are the control and ownership of information for profit. In this situation, the public initially pays for the development of new medical technology and then pays again when it is commercialized.

The Bayh-Dole Act of 1980 changed the way university research could be transferred to the private sector. Previously, patents resulting from subsidized research, such as the polio vaccine, became public domain. University faculties now actively seek commercial relationships and pursuit of profit while retaining the unique benefits of academic institutions.

In this new environment, proprietary interests stifle the exchange of information and impede progress. Faculty members also sit on the boards that award grants, determine the material presented at meetings, and serve as gatekeepers for journals. Competitive ideas and challenging criticisms risk suppression by academic entrepreneurs.

These and other abuses may be exacerbated by the rush for financial gain. All of the parties—universities, industry, and the public—will ultimately be diminished as academic integrity and objectivity are sacrificed in the names of institutional interdependence and expediency.

Philip Lempert, MD
Park View Health Care Campus
Ithaca, NY

In Reply: Interactions between the academic and industrial research enterprise in medicine are not just recent phenomena but have existed since the early 20th century. In recent years, however, the diversity and number of these connections have increased, raising fundamental questions about the role of both partners in the innovation process. According to Mr Ehrle, the current interface will lead to a “metastatic ethical meltdown.” We believe that Ehrle’s view ignores the main thrust of our argument. First, the risks of university-industry interactions are indeed important and require ongoing monitoring and debate. However, this debate needs to be informed by insight into the current division of labor between organizational partners. The traditional and familiar answer—academic faculty generate fundamental knowledge that industry in turn develops and markets—is simplistic and ignores the extensive flow of knowledge and technology that occurs in both directions throughout each stage of the innovation process. Second, and related to this, university-industry interactions have important public health and economic benefits. It is therefore important that society, and medical school and hospital leadership in particular, consider how they can maximize the upsides of collaboration while minimizing the downsides. “Balancing risks against benefits” is part of this process, not a contradictory position. A nuanced debate on these issues, rather than absolutist stances, can help shape the university-industry interface in years to come to optimize medical progress and benefit the public.

Dr Lempert raises important questions about the recent upsurge in patenting and licensing at US research universities. Although the pros and cons of patenting were not the focus of our article, we believe that university patenting practices have some problematic elements, and, in particular, we raised concerns about the patenting of research tools. However, we disagree that academic life and patent law are inherently incompatible; most institutions have an agreed upon, limited period for filing a patent (typically 60 days) after which publication can proceed. This is usually not the rate-limiting step in the publication process. Second, we question Lempert’s assertion that university patenting means that the public pays twice; he argues that it initially pays for the development of new medical technology through research support and then pays again when a technology is commercialized. In fact, the impetus for creating the Bayh-Dole Act of 1980 can be found in concerns that research findings were languishing in university laboratories and were not being commercialized, and therefore, that the public was paying once but getting nothing. Patents were believed to give an industrial incentive for the
development of these research findings and the costs to the public would be decreased, not increased, by earlier introduction of important new technologies. Whatever the theoretical arguments, the exact role of patents in facilitating the actual transfer of university knowledge to industry remains poorly understood. This important question deserves further empirical research.

Samuel O. Thier, MD  
Partners Health Care System  
Harvard Medical School  
Boston, Mass  

Annette C. Gelijns, PhD  
Department of Surgery and School of Public Health  
Columbia University  
New York, NY

1. Pub L No. 96-517.

Financial Disclosure: Dr Thier is on the board of directors of Merck & Co Inc, Charles River Laboratories Inc, and Pranalytica Inc (medical device manufacturer), none of which have financial interests in this article.

RESEARCH LETTER

Nosocomial Transmission of Vancomycin-Resistant Enterococci From Surfaces

To the Editor: Vancomycin-resistant enterococci (VRE) often contaminate environmental surfaces in the rooms of colonized patients,1 but the frequency of transfer from such surfaces to hands is not known. We tested the hypothesis that contact with contaminated surfaces would result in transfer of VRE to gloved hands and examined the potential role of disinfection of surfaces as a means to decrease transmission of VRE.

Methods. We performed a prospective culture survey of 13 patients (8 in a nursing home and 5 hospitalized) with VRE stool colonization. The density of VRE in each patient’s stool was quantified by methods previously described.1 Investigators donned sterile latex gloves and placed their hands for approximately 5 seconds onto each patient’s bed rail and then bedside table. The fingers of both gloved hands were rubbed together for 10 seconds in 50 mL of brain-heart infusion broth, the gloves were removed, and premoistened swabs were applied to 1.5-inch × 3-inch areas of the same environmental surfaces contacted by gloved hands. Broth enrichment cultures of gloved hands and environment were performed as previously described.1 For 8 patients, daily cultures were obtained at 3 PM for 4 days prior to any intervention, for 3 days during a period of daily “bucket-cleaning” disinfection2 each morning at 9 AM, and 11 to 13 days later. Identification and vancomycin susceptibility testing was performed in accordance with National Committee for Laboratory Standards guidelines. Pulsed-field gel electrophoresis (PFGE) was performed as previously described.1 Differences between categorical variables were assessed with the χ² test.

Results. Of the 13 patients, 9 were fecally incontinent, 4 had diarrhea, and 12 had greater than 4 log₁₀ VRE/g of stool (mean density=7.5 log₁₀ VRE/g). Prior to disinfection, at least 1 environmental surface had positive VRE culture results for 12 of the 13 (92%) patients, and gloved-hand cultures had positive VRE culture results for 6 of the 13 (46%) patients. Five of 6 patients evaluated by PFGE had identical environmental and hand isolates. None of the cultures of unused gloves or of environmental surfaces 30 minutes after disinfection grew VRE organisms. For the subset of patients evaluated, significant reductions in the percentage of positive afternoon environmental and gloved-hand culture results were observed during the period of disinfection (FIGURE).

Comment. Our findings demonstrate that contact with contaminated environmental surfaces may result in frequent transfer of VRE onto gloved hands. Such contamination may be an important source of VRE transmission, as colonized patients frequently remain unrecognized. VRE survive for long periods on surfaces, and health care workers often do not practice appropriate hand hygiene.3 Others have similarly demonstrated that a patient’s VRE strain may be acquired on gloves without any direct patient contact.4 Our findings reinforce the recommendation that hospitals have adequate procedures for cleaning and disinfecting environmental surfaces5 and demonstrate that health care workers should wash their hands after touching environmental surfaces. Since pathogens such as methicillin-resistant Staphylococcus aureus6 may also be transmitted from contaminated surfaces to hands, decontamination of the hospital environment deserves further

©2002 American Medical Association. All rights reserved.
study as a means to decrease transmission of nosocomial pathogens.

Amy J. Ray, MD
Department of Medicine
University Hospitals of Cleveland
Cleveland, Ohio

Claudia K. Hoyen, MD
Department of Pediatric Infectious Diseases
Rainbow Babies and Children’s Hospital
Cleveland

Trina F. Taub, RN
Elizabeth C. Eckstein, RN
Infection Control Department

Curtis J. Donskey, MD
Infectious Diseases Section
Louis Stokes Cleveland Department of Veterans Affairs Medical Center
Cleveland, Ohio

Funding/Support: This study was supported by a Career Development Award grant to from the Department of Veterans Affairs (Dr Donskey).


CORRECTIONS


Misleading Statements: In the response letter from Bagnall et al to Goudsmit in the December 26, 2001, issue of THE JOURNAL (2001;286:3079), there were 2 misleading statements. First, the sentence that reads, “It is unclear how many of those excluded were in the treatment and control groups,” should instead have read, “It is unclear which exclusions occurred in the treatment group and which in the control group.” Second, the sentence that reads, “Finally, the reference we presented for the London criteria was provided to us by Dr Goudsmit,” was printed in error and should be retracted.