Medicare reimbursements for such services, are currently premature, again until effectiveness is demonstrated. In our own clinical research trial of CT screening, subjects do not pay for CT (research grant funds pay for both the screening and incurred diagnostic CT studies). Dr. Gould recommends that it is better to spend limited resources on interventions proven to be effective, such as smoking cessation. We agree (although this particular proven intervention is often not covered by health insurance plans, and individuals must pay out of their own pockets for the service). However, former smokers remain at high risk for lung cancer, and a substantial fraction of the smoking population fails to quit. New cases of lung cancer are now as common in former smokers as in current smokers. Should we tell those who have quit smoking or those who can’t quit that there will be no new knowledge in lung cancer control? Once again, it is important to differentiate between research investigations of promising unproven interventions and clinical service recommendations for use of proven ones. Certainly the research investigation of new prevention or screening strategies is not in conflict with recommendations for smoking cessation.

Drs. Blum and Rinne offer the potential for positron emission tomography (PET) and somatostatin receptor imaging to diminish morbidity and reduce costs. These are not screening tests but rather diagnostic evaluations for detected pulmonary nodules. With CT screening, most detected nodules are < 10 mm in diameter. PET and somatostatin receptor imaging are not yet very useful for most such small nodules. However, we encourage Drs. Blum, Rinne, and others to pursue clinical research investigations to demonstrate the effectiveness of such diagnostic imaging tests.

In summary, we conducted our analysis to determine, based on our current limited knowledge, if CT screening for lung cancer could be potentially cost-effective and whether cost factors should deter further investigation with clinical research trials. We believe that we accomplished that task, and further believe that definitive clinical trials of the effectiveness of CT screening for lung cancer are both warranted and necessary. We are grateful for the interest shown in the article and the debate it has stimulated.

Thomas N. Chirikos, PhD
Todd Hazelton, MD
Melynn Tockman, MD, PhD
Robert Clark, MD
H. Lee Moffitt Cancer Center & Research Institute
Tampa, FL

Correspondence to: Robert Clark, MD; Chairman, Dept. Radiology; H. Lee Moffitt Cancer Center & Research Institute; Tampa, FL;

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How To Design a Negative Study

To the Editor:

In their article, published in the May issue of CHEST, Nightingale et al. compared treatments using formoterol and salmeterol in patients with severe asthma. The absence of difference regarding the effects of the two treatments led the authors to conclude that there was no difference in efficacy between the two drugs. This study has severe methodologic flaws.

The number of subjects needed was computed on an expected difference between the two active treatment arms of 20 L/min. For this to happen, the difference between the controlled arm (formoterol) and its placebo should be > 20 L/min, unless it was expected that the effects of salmeterol would be worse than placebo. So, finding a difference of only 14.4 L/min between the effects of placebo and formoterol means either that the patient selection was not valid or the dose used in these patients was too low.

Essentially, this results in an invalid study, where either the patients are resistant to treatment or the treatment is ineffective. In any event, the study is no longer powered to detect any difference between the active treatments, especially considering the number of dropouts (36%).

Finally, the comparison of a blinded formoterol vs placebo study to an unblinded study of treatment with salmeterol, which had been the previous treatment of almost half of the patients, seems unorthodox, to say the least. A double-dummy placebo-controlled study could easily have been performed by using salmeterol metered-dose inhaler (MDI) or a placebo MDI, both administered with an inhalation chamber.

We do not believe this study shows anything, including any lack of difference between the drugs. At the least an equivalence or nonsuperiority approach could have been tested.

Mathieu Molinard, MD
Nicholas Moore, MD
Hopital Pellegrin-Carreire
Bordeaux, France

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To the Editor:

We thank Professors Molinard and Moore for their interest in our article. They have some concerns regarding study design. As they are not clinicians, perhaps they are unaware that studies in severe asthma are very difficult to conduct. These patients are a major management problem and are usually excluded from conventional drug therapy trials. Any improvement in treatment would be a valuable addition to management in this difficult group of patients. Our study aimed to determine whether these patients would be better treated with either salmeterol or formoterol, and we described in the article the theoretical reasons why differences might be expected. We found that both drugs significantly increased mean morning peak flow by approximately 15 L/min above placebo. Consequently, we should have detected a similar difference in peak flow between the two drugs. However, due to the high number of patient withdrawals, the power of our study was less than originally predicted. In regard to choice of drug doses, we wished to compare the drugs at doses used in current clinical practice. Therefore, doses were chosen on this basis rather than those most likely to give a positive result. A double-blind, double-placebo design would have been preferable to the use of just one placebo. However, a matching salmeterol placebo was not available from the manufacturers. We felt it was preferable to include a single placebo rather than no placebo at all. Finally, our study has shown that, albeit not differing in efficacy, both drugs improve lung function in severe asthma and should prove useful in treatment of this difficult patient group.

Julia A. Nightingale, PhD
Duncan F. Rogers, PhD
Peter J. Barnes, DM
National Heart and Lung Institute
London, UK

Identifying Sleep Apnea

To the Editor:

In their article, Namen and colleagues (June 2002)1 reported an encouraging 12-fold increase in the number of outpatient visits for sleep apnea over a 9-year period. Indeed, it seems as if the glass is half full. However, the discouraging news was that this significant increase occurred primarily from 1992 to 1996, with a return to the status quo from 1996 to 1998. In contrast to the number of visits for sleep apnea, the number of outpatient visits for insomnia has continued to increase yearly. I am concerned that this glass is, in fact, half empty.

I believe that improving physicians’ knowledge about sleep apnea is critical for improving sleep apnea-related screening and treatment practices. Although there has been a clear call for the development of sleep apnea educational programs by the sleep community, to date no sleep apnea educational programs have been developed, instituted, and tested in a prospective, randomized manner among health-care providers. However, any sleep apnea educational intervention will not only need to increase physician recognition and treatment of sleep apnea, but will also need to demonstrate an improvement in patient outcomes. Thus, as Drs. Littner and Alessi suggest in their editorial, it is these patient outcomes that will further persuade health-care providers to identify and treat even more patients with sleep apnea.

Helena Schotland, MD
University of Pennsylvania School of Medicine
Philadelphia, PA

Endobronchial Actinomycosis and Foreign Body

To the Editor:

We read with interest the article by Chouabe et al (June 2002)1 on endobronchial actinomycosis associated with a foreign body. We would like to share our experience. A 75-year-old man presented with productive cough and fever. The chest radiograph revealed atelectasis in the right lower lobe. A thoracic CT scan showed calcified material in the right lower bronchus. Fiberoptic bronchoscopy revealed a granulomatous reaction in the right lower bronchus suggestive of a tumor almost obstructing the bronchial lumen, but the foreign body was not identified at the initial examination. Testing of an endobronchial biopsy specimen showed marked chronic inflammatory cell infiltration and proliferation of granulation tissue. The granulation tissue was tested by Gomori methenamine-silver stain and was positive for Actinomyces.

The patient was treated with penicillin G for 2 weeks. On follow-up bronchoscopy, the granulomatous lesion in the right lower bronchus had disappeared. At the end of this procedure, the patient coughed out a botanical seed, which was confirmed by microscopic examination. The calcified material in the right lower bronchus disappeared in the thoracic CT scan. For the adverse effect of penicillin G, the patient received erythromycin for 6 months. The condition of our patient was very similar to that of the patient in the report by Chouabe et al,1 and we can fully share their observations. Antibiotic therapy and also extraction of the