but only for well-selected patients (young, without history of malignancy or smoking, with a nodule radiologic pattern of benignity or nodules with small dimension). We think that the clinician in a well-determined situation does have the option of a short watchful period.⁴ But for us the watchful period doesn't last 90 days without any radiologic control; in fact our waiting period is shorter than 90 days, and every 20 days we perform a thoracic computed tomographic scan.

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doi:10.1016/S0022-5223(03)00578-6

Reply to the Editor:

My coauthors and I greatly appreciate Sortini and colleagues' comments, and we agree with their premise that prompt resection of suspicious solitary pulmonary nodules is the standard of care. However, this is a separate issue from the central conclusion of our report that there remains no good evidence to indicate that watchful waiting for selected patients worsens prognosis. This question is unlikely to be answered without a prospective trial, and we are therefore left with reasoned discussion of the evidence available.

Sortini and colleagues first take issue with our suggestion that tumor biology, and not just duration of tumor growth, may be an important factor in the observation that larger tumors are associated with a worse prognosis. Our intent was to point

out that the data on tumor size and prognosis provide only circumstantial evidence for the importance of time and cannot be interpreted as proof that watchful waiting is necessarily bad. Other factors are also at play, among which tumor biology, independent of time, must be a consideration. When confronted with a nodule of low suspicion, we are then left with the question of how important time is. This leads to their second concern, that our choice of 90 days as a cutoff was inappropriate. They suggest that comparison to a group of patients who had surgery within 10 to 15 days would be more meaningful. This window is as arbitrary as any other, and 90 days was chosen for the variety of practical reasons cited in our report. Unfortunately, we are often confronted with circumstances beyond our control (such as delays in referral to a specialist, comorbidities that require evaluation and management, resource limitations that delay scheduling of necessary preoperative testing, and patient preferences) that limit our ability to bring patients to surgery expeditiously. Furthermore, we attempted to start the clock ticking with the very first chest radiograph that showed a nodule, as opposed to the date of the chest computed tomographic scan or the visit to the specialist. Thus a 15-day cutoff would be bound to produce a cohort of patients that not only would be small relative to the entire group but might also be preselected for few comorbidities and good performance status, factors that are known to favorably affect prognosis. Interestingly, Sortini and colleagues conclude by agreeing that short-term watchful waiting is appropriate in selected circumstances. Thus the optimal duration of this period remains the only open question. They have chosen 20 days, an aggressive approach that seems of questionable value.¹ As mentioned in both our report and Dr Ginsberg's accompanying commentary,² new computed tomography algorithms that enable volumetric modeling may permit accurate assessments of doubling times during relatively short periods (although 20 days seems ambitious).¹ The potential for this technology is exciting, but it is not yet either mature or widely available, and its value has not been demonstrated.

We hope that one day we will be able to tell with a high degree of certainty whether any given lung nodule is benign or malignant,

and do so at reasonable cost with no morbidity. Until then, we must deal with the question of how much economic cost and potential morbidity are justified by the time benefit to those patients whose nodules are malignant. Unfortunately, we have so far been unable to quantify that benefit.

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Malignant status at surgical margin of limited-resected non-small cell lung cancer: A crucial finding for predicting local relapse

To the Editor:

In a recent issue, Higashiyama and colleagues¹ reported on the malignant status of the surgical margin of limited-resected non-small cell lung cancer (NSCLC). They concluded that the cytologically negative results of examination of the surgical margin by the technique of intraoperative lavage in limited surgery for lung cancer may be predict lack of local recurrence in the surgical margin. The results in Higashiyama and colleagues' study¹ are similar to those of my own investigation.² As such, I believe Higashiyama and colleagues' technique is also useful to find out whether NSCLC has been resected completely.

Although no recurrence on the malignant negative surgical margin was found in Higashiyama and colleagues' study,¹ I have a criticism of their technique in correcting cells on the surgical margin. It is not rare that malignant cells exist on the pleura in the naked situation³ and after needle aspiration cytologic examination.⁴ Their complicated technique was lavage cytologic examination without flooding the pleura. If the pleura is flooded for even a short while, malignant cells on the pleura contaminate it. However, it is difficult to avoid flooding the pleura with saline solution in a cup. Further, the spun cells degen-

erate, for a less exact diagnosis than with smeared cells. The run-across method, which is smeared cell cytologic examination—the glass slide is run across the whole of the surgical margin^{4,5}—is so simple and little contaminated that the malignant positive rate on the surgical margin of excised resected non-small cell lung cancer has been higher than with Higashiyama and colleagues' technique.¹ Whether the run-across method is more sensitive or Higashiyama and colleagues' technique is less accurate has been unclear, because both studies^{1,2} have small numbers of patients with malignant positive margins. Further study is needed to find the significance of malignant status on the surgical margin of limited-resected resected non-small cell lung cancer.

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Reply to the Editor:

We appreciate the questions raised by Sawabata in his letter about our article. In this article,¹ as well as the preliminary report,² we emphasized that this novel intra-

operative lavage cytologic technique in limited surgery for lung cancer is clinically useful in checking for complete resection of the primary lesion. This technique is also widely applied in metastasectomy for metastatic pulmonary tumors.³

One of Sawabata's questions is a problem of tumor cell contamination from the pleural surface when surgical margins of the resected specimens are washed. As described in our article,^{1,2} when limited surgery is performed with a stapler alone, only all fired cartridges are washed, and therefore it is out of problem. When limited surgery is performed with the electric scissors or Nd:YAG laser, the specimen should be carefully washed without flooding of pleural surface. However, it is sometimes difficult to avoid flooding the pleura. When the pleural surface is carelessly washed, the result of intrathoracic pleural lavage cytologic examination immediately after thoracotomy should be taken into consideration⁴. Even if the surgical margin is cytologically positive, limited surgery is usually finished when pleural lavage cytologic examination is positive; when it is negative, the surgical mode should be carefully converted, considering together macroscopic and microscopic findings of surgical margin, especially in intentional cases.

Another question is a problem of the rate of positive cytologic results in the surgical margin after limited surgery for lung cancer. By Sawabata and colleagues' "run-across" method⁵, the positive cytologic rate in the surgical margin was surprisingly high (47%), whereas it was lower (10%) by our method. We speculate that this result may be due to the difference of the clinicopathologic backgrounds of the tested patients. The data from Sawabata and colleagues' method were obtained in only 15 compromised limited cases,⁵ whereas those from ours¹ were in not only 55 compromised but also 57 intentional limited cases. The number of Sawabata and colleagues' tested patients was too small.⁵ Moreover, it may be reasonable that the rate in compromised cases was higher than that in intentional cases. In fact, the rate of positive cytologic results in compromised cases in our series was 18%.¹ Thus in compromised limited surgery the positive cytologic rate

in the surgical margins may be strongly dependent on tumor size, tumor location, and, importantly, surgical cutting technique and indication for limited surgery. Therefore, because the positive cytologic rate in intentional limited surgery is rather more important, such data obtained by Sawabata and colleagues' method⁵ should be shown. We think that the cause of the rate in our article¹ was not that the sensitivity of our cytologic technique was low. Comparative analysis is also needed between the "run-across" technique and our novel technique in checking accurately the surgical margins status of limited surgery for lung cancer.

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