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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