

how mortality figures cannot be entirely relied on to dictate health policy.²

One, therefore, has to objectively assess its merits and drawbacks without recourse to pressure from political drives for greater transparency.

One potential advantage is that public disclosure removes the fortifications inherent in local clinical governance where staff may be concerned about stigmatism associated with whistle blowing. Another advantage is that it allows for a more accurate informed consent process for patients.

There is a perceived third advantage in that it would drive up surgical performance on the part of the individual surgeon. However, this may actually be counterproductive. Cardiac surgeons are by nature a highly successful and competitive niche, and this drive for excellence alone has brought down mortality rates over the past 3 decades. By forcing surgeons to disclose their figures, there is the potential for risk-aversion on their part in an attempt to artificially improve their figures to compete for cases and their own survival.³

However, possibly the greatest criticism of this public disclosure is that by publishing surgeons' mortality rates in isolation, it implies that they are singularly responsible when things go wrong. The management of the surgical patient is, by all intents and purposes, a *process*. The cardiac surgeon has the privilege of being closely involved in the whole process but he or she is certainly not omnipotent. The safe and rapid recovery of the surgical patient is as much dependent on the allied health care professionals involved with the patient as it is on the surgeon. However, this is not translated in the mortality figures. Cardiac surgeons therefore seem alone, staring into an abyss that is often staring back at them with intent.

Hence, by stripping away the myth of cardiac surgeons as gods and

allowing them to be scrutinized as leaders in a democratic manner, society has ironically increased the burden on them to perform miracles. We cannot, however, run away from a greater drive for accountability in the medical profession. Despite this, the early lessons learnt from cardiac surgery in the United Kingdom demonstrate that this framework must be fair, interpretable, and, above all, have a clear beneficial purpose in improving patient care rather than being an unnecessary process of self-flagellation.

Priyadharshanan Ariyaratnam,
BM, BSc (Hons), MRCS
Castle Hill Hospital
Cottingham, United Kingdom

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<http://dx.doi.org/10.1016/j.jtcvs.2013.05.006>

IS SEGMENTECTOMY SUITABLE FOR SOLID-TYPE LUNG CANCER?

To the Editor:

I am interested in an article entitled "Oncologic outcomes of segmentectomy compared with lobectomy for clinical stage IA lung adenocarcinoma: Propensity score-matched analysis in a multicenter study," by Tsutani and colleagues.¹ This study, I believe, revealed noninferiority (not suitability) of segmentectomy for clinical stage IA non-small cell lung cancer, with end points of overall survival and relapse-free survival.

Because a lung cancer recurrence that occurred exclusively in cases

of segmentectomy must be that in the residual pulmonary lobe, such cancer relapse must be avoided by performing lobectomy. Approximately one third of interlobular sentinel nodes exist at other segments than the segment containing a cancerous lesion.² A lesion revealing a pure solid pattern using computed tomography and a high maximum standard uptake value (SUVmax) in a fludeoxyglucose positron emission tomography scan has high potential of lymph node metastasis³ and of causing isolated tumor cells as a cluster (an indicator of cancer relapse) in the blood.⁴ This is because a pure solid-type and high SUVmax cancer lesion possibly has high potential of cancer relapse at the residual lobe after segmentectomy. Indeed, Tsutani and colleagues revealed 2 cases of cancer recurrence at the residual lobe. As such, segmentectomy should be carefully indicated in cases having a high potential of recurrence.

The authors mentioned in the current article that the result of a prospective study treating noninferiority of segmentectomy to lobectomy in cases of peripheral small-sized non-small cell lung cancer (JCOG0802/WJOG4607L)⁵ may provide an important insight into the issue regarding segmentectomy for a solid cancer lesion with a high SUVmax level, because such a case may have high potential of cancer relapse at the residual pulmonary lobe in segmentectomy cases.

I believe it is necessary to perform a nested analysis extracted from such cases with a solid-type lung cancer in the study provided by Tsutani and colleagues.

Noriyoshi Sawabata, MD, PhD
Department of General Thoracic
Surgery
Osaka University Graduate School of
Medicine
Osaka, Japan

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<http://dx.doi.org/10.1016/j.jtcvs.2013.04.019>

Reply to the Editor:

We appreciate the comments and concerns expressed by Dr Sawabata regarding our article, titled "Oncologic outcomes of segmentectomy compared with lobectomy for clinical stage IA lung adenocarcinoma: Propensity score-matched analysis in a multicenter study."¹ We believe any recurrence in the residual pulmonary segments after segmentectomy must be avoided as much as possible, as Sawabata stated. Actually, we experienced 2 recurrences in the residual segments after segmentectomy in this study.¹ One patient had 2 cm of pure solid tumor on high-resolution computed tomography (HRCT). He underwent resection of left S4+5 segments and local recurrence in the surgical stump occurred 6 months after the operation. The other patient had 2 cm of mixed ground-glass opacity (GGO) tumor including the majority of the solid part on HRCT. He underwent resection of the right S2 segment and local recurrence developed 24

months after the operation. Fortunately, these patients were treated with completion lobectomy and are alive well without disease 31 months and 72 months after the operations, respectively.

In our study, the independent prognostic factors for local recurrence-free survival were solid tumor size on HRCT and maximum standardized uptake value (SUVmax) on F-18-fluorodeoxyglucose positron emission tomography/computed tomography (FDG-PET/CT).¹ Therefore, segmentectomy for a tumor that has a large solid tumor size or a high SUVmax should be carefully indicated. When segmentectomy is performed in such a risky case, taking wide surgical margins and intraoperative lymph node assessment using frozen sections are mandatory. On the other hand, we previously proposed the N0 criteria of solid tumor size <0.8 cm or SUVmax <1.5 for clinical stage IA lung adenocarcinoma.² Patients meeting the N0 criteria can be good candidates for sublobar resection with sufficient surgical margin including wedge resection because of little chance to have pathologic nodal metastasis, for which we concentrate our attention on the surgical margin. We also demonstrated that solid tumor size on HRCT and SUVmax on FDG-PET/CT are independent predictors of pathologic invasiveness, lymph node metastasis, and prognostic factors for clinical stage IA lung adenocarcinoma.^{2,3} Optimal surgical procedure for clinical stage IA lung adenocarcinoma can be chosen using solid tumor size on HRCT and SUVmax on FDG-PET/CT. Moreover, we reported solid tumors without GGO generally showed worse pathologic behaviors than mixed tumors with GGO in clinical stage IA lung adenocarcinoma.⁴ However, a solid tumor with low SUVmax can be a good candidate for segmentectomy because such a tumor has low malignant potential and shows good prognosis.^{2,4}

We failed to carry out a subset analysis comparing segmentectomy with lobectomy in patients with solid tumor on HRCT since in only 13 patients we had performed segmentectomy for solid tumors. In general, thoracic surgeons have tended to choose segmentectomy for a mixed tumor with GGO in T1 N0 M0 lung adenocarcinoma. To answer the question "Is segmentectomy suitable for solid type lung cancer?" we have to await the result of large phase III trials, CALGB-140503 in the United States and JCOG0802/WJOG4607L in Japan.⁵ We encourage any participants to enroll patients in these studies.

Yasuhiro Tsutani, MD, PhD
Yoshihiro Miyata, MD, PhD
Morihiro Okada, MD, PhD
Department of Surgical Oncology
Hiroshima University
Hiroshima, Japan

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<http://dx.doi.org/10.1016/j.jtcvs.2013.04.020>