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IS PREOPERATIVE POSITRON EMISSION TOMOGRAPHY–COMPUTED TOMOGRAPHY A USEFUL DIAGNOSTIC OR STAGING TOOL FOR PURE GROUND GLASS OPACITY NODULAR ADENOCARCINOMAS?

Reply to the Editor:

We thank Baisi and colleagues for their interest in our work. As they pointed out in their letter, we were unable to make a pathologic diagnosis of nodal status in 51 patients. These patients, however, had peripherally located pure ground glass opacity (GGO) nodules without enlarged lymph nodes (LNs) on preoperative chest computed tomography (CT). All these patients underwent follow-up chest CT and positron emission tomography–computed tomography (PET/CT), and there was neither enlargement of LNs nor glucose uptake during a mean period of 47.9 months. This result supports the surmise that there was no LN metastasis even in the patients who did not undergo LN dissection. These findings are supported by previous reports that a PET or PET/CT scan is not required in patients with peripherally located stage IA adenocarcinomas, including pure GGO nodular adenocarcinoma.¹⁻¹¹

Second, regarding the usefulness of PET/CT for the information of the invasiveness of pure GGO nodules, we still doubt that PET/CT is really necessary in terms of cost-effectiveness. Of course, several recent studies have demonstrated that invasive adenocarcinoma may also be pure GGO nodules, particularly in well-differentiated or well-organized acinar or papillary-predominant adenocarcinomas.^{3,4,8,11-13} However, given that invasive adenocarcinomas manifesting as pure GGO nodule showed no tumor recurrence and tended to

show relatively less aggressive behavior than tumors with part-solid or solid feature, we think PET/CT adds little value as well when it comes to prognostic stratification. Moreover, PET/CT might not change the operation method even if a GGO nodule shows a positive glucose uptake suggesting invasiveness. With regard to the extent of surgical resection, limited resection is acceptable when feasible, even though some GGO nodules were invasive adenocarcinomas. This is because, even when limited resection was performed, there were no cases of local recurrence or mediastinal LN metastasis, consistent with previous data.^{3,11,13} Moreover, patients with pure GGO nodules have a relatively high probability of second primary GGO nodules in other lobes.¹⁴ Recently, an increasing number of studies have reported that limited resection rather than lobectomy is sufficient for the treatment of pure GGO nodule type primary lung cancer, and systematic nodal dissection may not be required.^{3,4,15}

Our study was inherently limited by its retrospective design, and it may have had a selection bias because of its relatively small cohort. We therefore agree that further prospective studies with large cohorts should be performed to evaluate the utility of preoperative PET/CT and brain magnetic resonance imaging.

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