

Table 1. Masaoka-Koga Staging System with International Thymic Malignancy Interest Group Definition of Details^a

Stage	Definition
I	Grossly and microscopically completely encapsulated tumor <i>This includes tumors with invasion into but not through the capsule, or tumors in which the capsule is missing but without invasion into surrounding tissues</i>
IIa	Microscopic transcapsular invasion (<i>not grossly appreciated</i>)
IIb	Macroscopic invasion into thymic or surrounding fatty tissue, or grossly adherent to but not breaking through mediastinal pleura or pericardium <i>Gross visual tumor extension into normal thymus or perithymic fat surrounding the thymoma (microscopically confirmed), or Adherence to pleura or pericardium making removal of these structures necessary during resection, with microscopic confirmation of perithymic invasion (but without microscopic extension into or through the mediastinal pleura or into the fibrous layer of the pericardium)</i>
III	Macroscopic invasion into neighboring organ (i.e., pericardium, great vessel, or lung) <i>This includes extension of the primary tumor to any of the following tissues: Microscopic involvement of mediastinal pleura (either partial or penetrating the elastin layer); or Microscopic involvement of the pericardium (either partial in the fibrous layer or penetrating through to the serosal layer); or Microscopically confirmed direct penetration into the outer elastin layer of the visceral pleura or into the lung parenchyma; or Invasion into the phrenic or vagus nerve (microscopically confirmed, adherence alone is not sufficient); or Invasion into or penetration through the major vascular structures (microscopically confirmed); Adherence (i.e., fibrous attachment) of lung or adjacent organs only if there is mediastinal pleural or pericardial invasion (microscopically confirmed)</i>
IVa	Pleural or pericardial metastases <i>Microscopically confirmed nodules, separate from the primary tumor, involving the visceral or parietal pleural surfaces, or the pericardial or epicardial surfaces</i>
IVb	Lymphogenous or hematogenous metastasis <i>Any nodal involvement (e.g., anterior mediastinal, intrathoracic, low or anterior cervical nodes, any other extrathoracic nodes) Distant metastases (i.e., extrathoracic and outside the cervical perithymic region) or pulmonary parenchymal nodules (not a pleural implant)</i>

a. Adapted from Detterbeck FC et al. (8)