

## Efficacy and Safety of Imatinib Mesylate in Recurrent or Metastatic Gastrointestinal Stromal Tumor (GIST)

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**Background :** Imatinib mesylate (Gleevec<sup>TM</sup>), a selective tyrosine kinase inhibitor, resulted in dramatic response and improved survival in advanced gastrointestinal stromal tumor (GIST), particularly in patients with tumors harboring activating KIT mutations. Since 2001, imatinib mesylate was introduced for advanced GIST treatment in Korea. This study examined the efficacy and toxicity of front line imatinib mesylate in single institution. **Patients and Methods :** Retrospective review of medical records at Seoul National University Hospital between Jan.1st 2001 and July.30th 2007 was performed. We included either patients treated with imatinib as a first line therapy for metastatic GIST or patients who received imatinib as front line palliative therapy after relapse or disease progression following operation. Forty-two patients were treated with imatinib as front line therapy. We assessed antitumor response, the safety and the tolerability of the drug. **Results :** A total of 42 patients (M:F = 29:13, median age 58 years) received 400 mg of imatinib daily. Nineteen patients (45.2%) had distant metastasis at the time of diagnosis. c-KIT (CD117) was positive in 95.2% by immunohistochemistry. Overall disease control rate was 95 % (40/42 pts.). With a median follow up of 35.1 months, the median time to progression (TTP) after 400mg/day imatinib was 18.9 months and the median survival was not yet reached. 400mg daily imatinib was tolerable and the adverse events were mostly mild to moderate. However, 19 of 42 patients need dose modification. Common toxicities were G1/2 facial edema (9/42 pts., 19%) and G3/4 neutropenia (4/42 pts., 9.5%). Tumor bleeding (3/42 pts., 7.1%), gastrointestinal hemorrhage (2/42 pts., 4.7%) and HBV reactivation (1/42 pts., 2.4%) were observed. After failure to 400mg daily dose imatinib (13 patients), 11 patients received dose escalated imatinib therapy. Median TTP was 2.1 months after dose escalation, disease control rate was 54.5% (6/11 pts.). **Conclusion :** The efficacy of imatinib mesylate in advanced GIST was comparable to prior studies. Although toxicity profile was similar, 400mg daily dosing schedule was tolerated without dose modification in 55% of patients.

## Initial Diagnosis of Breast Cancer via Pathological Examination of Tumor Thrombi in Superior Vena Cava

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Deep vein thrombosis and pulmonary embolism are the most common thrombotic conditions in patients with malignant disease, but superior vena cava(SVC) syndrome caused by a tumor thrombus is a rare complication. There has been no report about presence of tumor thrombi in SVC in occult breast cancer. Here we describe a unusual case of SVC syndrome in which the initial diagnosis of a breast cancer was made via pathologic examination of tumor thrombi in the superior vena cava. Histologic examination of specimen from the SVC showed microscopic tumor embolus and foci of associated thrombus formation. The tumor cell was in a cluster and poorly differentiated. On immunohistochemical studies, the tumor cells were positive for cytokeratin and progesterone receptors and negative for estrogen receptors and C-erbB2. In spite of both physical examination of the breasts and several imaging studies, we could not find a primary lesion. After diagnosis of a breast cancer, systemic chemotherapy with adriamycin and docetaxel was started and resulted in complete relief of her symptoms and marked resolution of tumor thrombi in SVC.