all cases but one with EGFR mutation exhibited a hobnail cell type dominancy. In the morphological features, hobnail cell type and the presence of BAC and MPP component are good predictors of EGFR mutations in pulmonary adenocarcinoma.

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Pulmonary Neuroendocrine (NE) tumors: a 15-year retrospective clinicopathologic study of 317 cases

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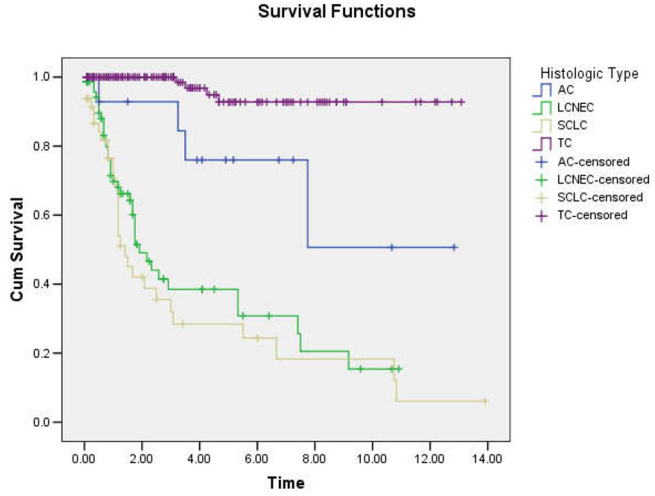
Background: Pulmonary NE tumors are a distinct subset of tumors composing approximately 20% of all lung cancers. The main tumor types include typical carcinoid (TC), atypical carcinoid (AC), large cell NE carcinoma (LCNEC) and small cell carcinoma (SCLC). Although pulmonary NE tumors share certain morphologic, immunohistochemical, and ultrastructural features, they represent a broad clinicopathologic spectrum with varying morphologic features and biological behavior. Their clinicopathologic characteristics and relative grade of malignancy have not yet been well defined and are still being assessed.

Methods: 317 cases of surgically resected pulmonary NE tumors diagnosed between 1992 and 2006 from the surgical pathology records of the Department of Pathology at Memorial Sloan-Kettering Cancer Center were reassessed retrospectively according to 2004 World Health Organization classification. A detailed review of the gross and histologic features was performed and the clinical features and followup were obtained from medical records.

Results: Of 317 cases, there were 171 TC (53.9%), 19 AC (6.0%), 79 LCNEC (24.9%) and 48 SCLC (15.2%). Patients were 133 men and 184 women with an average age of 63 years. The median tumor size was 2.1 cm, ranging from 0.5 to 12.5 cm. LCNEC and SCLC cases tended to have larger tumor size (p<0.001) than TC and AC cases. Compared with other NE tumors, TC cases affected women significantly more often than men (p=0.01). Smoking was more frequent (%) and heavier (mean pack years) in LCNEC (98%, 61) and SCLC (97%, 57) compared to TC (56%, 17) and AC (60%, 14) (p<0.001). The histologic groups showed significant correlations with several pathologic factors including vascular invasion (p<0.001), lymph node metastasis (p<0.001), pleural invasion (p<0.001), and stage (p<0.001). Mean age (yrs) for TC (56.7) and AC (58.7) patients was significantly less than for SCLC (67.6) but not LCNEC (63.5) patients; LCNEC patients were significantly younger than SCLC patients (p=0.008). 5-year survival rates for patients with all stages were 97.7% for TC, 78.9% for AC, 51.9% for LCNEC and 37.5% for SCLC (p<0.001). Survival was significantly better for TC compared to AC (p=0.002), better for AC compared to LCNEC (p=0.01) and SCLC (p=0.002) but there was no significant difference in survival between LCNEC and SCLC (p=0.253) (Fig. 1).



Conclusions: Our data confirms that TC are low grade, AC intermediate grade and that LCNEC and SCLC are high grade NE lung tumors. We also found SCLC patients are significantly older than LCNEC as well as both TC and AC patients. Smoking was more frequent and heavier in high grade NE tumor patients compared to both TC and AC patients. Further clinical and molecular studies may advance understanding of the optimal treatment and molecular biology of these tumors, especially in AC and LCNEC.

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Rhabdoid Variant of Lung cancer- Clinicopathological Details of a case

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Introduction: Primary rhabdoid tumor of lung is a rare histological and clinical entity. Lung tumors with rhabdoid features have been included as a variant of large cell carcinoma in 1999 WHO classification of lung tumors. Primary lung rhabdoid is very rare with only 39 cases reported till date and therefore clinical and radiological data are required to establish the diagnosis and exclude an asymptomatic renal primary We describe our experience with treating a case of rhabdoid tumor of lung with an aim to add to the existing body of literature about this rare histology.

Materials and Methods: A 36 year old lady presented to us in March 2003 with a history of hemoptysis about 3-4 times. There was no history of cough, expectoration, fever, chest pain or dyspnea. CT scan chest showed left lung upper lobe mass 5*5 cm abutting mediastinal vascular structures. Bronchial biopsy was strongly suspicious of malignancy Metastatic workup was normal. She underwent left pneumonectomy in May 2003. Post-op gross pathology report showed a 6*5 cm tumor. Microscopic examination revealed markedly cellular tumor, arranged in lobules and separated by fibrocollagenous septae. Tumor cells were oval to polygonal in shape with abundant cytoplasm, vesicular nucleus, some of them having prominent nucleolus. Immunohistochemical staining showed positivity to S-100, Vimentin, and EMA. It was negative for LCA, HMB-45 and CEA. A diagnosis of undifferentiated carcinoma, Rhabdoid Variant was made. Resected margins of bronchus and lymph nodes were free of tumor. She received adjuvant chemotherapy with inj. Paclitaxel(175mg/m^2) i.v. D1, inj. Carboplatin AUC5 i.v. D2, 4weekly for 6 cycles from august 2003 to January 2004. Follow up CT scan in November 2005 revealed liver metastases in segments 2 & 3 with no disease in the chest. FNAC from the liver lesion showed metas-

