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Original Communications

## Neuroendocrine neoplasms of the bronchopulmonary tract

A classification of the spectrum of carcinoid to small cell carcinoma and intervening variants

Eighty-one primary pulmonary neuroandocrine neoplasms were assessed by the classification of Gould and associates. The neuroandocrine features of these tumors were studied by a combination of annuational light microscopy, electron microscopy, and immunohistochemical staining for hormonal substances and neuroa-specific enoises. In each case, clinical-follow-up was obtained to test the prognestic value of this new pathological classification. This study indicated that bronchial carcinoids are very low-grade neuroandocrine neoplasms that are locally invasive and only occasionally metastasize has in their course. Wall-differentiated neuroandocrine carcinomas are relatively low-grade carcinomas that either present with or subsequently develop nodal or distant metastases in 73% of patients. Intermediate cell neuroandocrine carcinomas are highly aggressive tumors often mistakenly called "harpe call undifferentiated carcinoma." Their clinical course is comparable to that of small cell neuroandocrine carcinomass, which has a mean survival of 9 months. The different clinical courses of these tumors demonstrate the predictive value of the proposed classification. It appears particularly valuable to identify well-differentiated neuroandocrine carcinoma as a low-grade carcinoma, distinct from true broachial carcinoids. This classification may resolve some discrepancies regarding the therapy for and prognosis of "carcinoids" and their presumed variants.

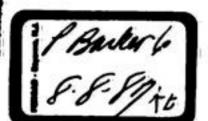
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Therapy for and management of bronchopulmonary neoplasms are dependent upon accurate diagnostic evaluation and pathological classification. In sharp contrast with other organ systems, the classification of broncho-

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