Evaluation of diagnostic and prognostic significance of Ki-67 index in pulmonary carcinoid tumours.

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As the second commonest group of neuroendocrine tumours, bronchial NET are rightly generating increasing research interest aimed at better understanding their natural history with an aim of developing better prognostic and predictive markers. This recent paper, by colleagues from Manchester, looks at whether determining the proliferative index using immunohistochemistry staining for Ki-67 protein was helpful in characterizing the natural history of typical and atypical bronchial carcinoids. In 94 patients, 84 having undergone resection for cure, Ki-67 labelling was accurate at differentiating between typical and atypical carcinoid (as assessed by and experienced neuroendocrine pathologist). Ki-67 in combination with mitotic index and the presence or absence of necrosis within resected tumours allowed separation of patients into 4 groups with very low, low, intermediate and high risks of relapse.

This paper adds to a growing body of research highlighting the possible utility of including KI-67 staining in the routine histological analysis of bronchial neuroendocrine tumours. There are still issues to be agreed upon including standardization of Ki-67 analysis and where this marker is likely to give most clinical information (see an excellent review article by Pelosi et al: Ki-67 antigen in lung neuroendocrine tumors: unraveling a role in clinical practice. J Thorac Oncol. 2014 Mar;9(3):273-84).