



## FACT SHEET

### 2011 IASLC/ATS/ERS International Multidisciplinary Classification of Lung Adenocarcinoma

**WHAT:** The International Association for the Study of Lung Cancer (IASLC), the American Thoracic Society (ATS) and the European Respiratory Society (ERS) collaborated to produce a new international multidisciplinary classification of lung adenocarcinoma, a subtype that accounts for almost half of all lung cancers. Published in early 2011, it was the first revision to the lung adenocarcinoma classification since 2004 and the first to use a multidisciplinary approach to classifying this type of cancer.

**WHY:** Because of recent advances in the understanding of lung adenocarcinoma, there was a need for a revised classification based not only on pathology, but on an integrated multidisciplinary approach involving pathologists, oncologists, pulmonologists, radiologists, molecular biologists and thoracic surgeons.

**WHEN:** The new classification was developed during a series of meetings between March 2008 and December 2009. It was published in the February 2011 issue of the *Journal of Thoracic Oncology*, the official journal of the IASLC.

**HOW:** Panel members included thoracic medical oncologists, pulmonologists, radiologists, molecular biologists, thoracic surgeons and pathologists, nominated by the three supporting institutions. A systematic review was performed under the guidance of the American Thoracic Society Documents Development and Implementation Committee. The search strategy identified 11,368 citations, of which 312 articles met specified eligibility criteria and were retrieved for full text review.

#### MAJOR CHANGES:

- The terms BAC (bronchioloalveolar carcinoma) and mixed subtype adenocarcinoma are no longer recommended. For resection specimens, new concepts were introduced including adenocarcinoma in situ (AIS) and minimally invasive adenocarcinoma (MIA) for small solitary adenocarcinomas to define patients who, if they undergo complete resection, will have 100% or near 100% disease-specific survival, respectively.

- This classification provides guidance for small biopsies and cytology specimens, as approximately 70% of lung cancers are diagnosed in such samples. Non-small cell lung carcinomas (NSCLCs), in patients with advanced-stage disease, are to be classified into more specific types such as adenocarcinoma or squamous cell carcinoma whenever possible for several reasons:
  - adenocarcinoma or NSCLC not otherwise specified (NSCLC-NOS) should be tested for epidermal growth factor receptor (EGFR) mutations, as the presence of these mutations can predict responsiveness to EGFR tyrosine kinase inhibitors;
  - adenocarcinoma histology or NSCLC-NOS are strong predictors for improved outcome with pemetrexed therapy compared with squamous cell carcinoma;
  - potential life-threatening hemorrhage may occur in patients with squamous cell carcinoma who receive bevacizumab.
- If the tumor cannot be classified based on light microscopy alone, special studies such as immunohistochemistry and/or mucin stains should be applied to classify the tumor further. Use of the term NSCLC not otherwise specified should be minimized.

**FOR MORE INFORMATION:** [Click here for a link](#) to the full article from the *Journal of Thoracic Oncology*.

**ABOUT IASLC:** The International Association for the Study of Lung Cancer is the only global organization dedicated to the study of lung cancer. Founded in 1972, the association's membership includes more than 3,500 lung cancer specialists in 80 countries.

IASLC members promote the study of etiology, epidemiology, prevention, diagnosis, treatment and all other aspects of lung cancer and thoracic malignancies. IASLC disseminates information about lung cancer to scientists, members of the medical community and the public, and uses all available means to eliminate lung cancer as a health threat for the individual patients and throughout the world. Membership is open to any physician, scientist or allied health professional interested in lung cancer. For more information please visit <http://iaslc.org/>.