Resource Summary Report

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Classification of Human Lung Carcinomas by mRNA Expression Profiling Reveals Distinct Adenocarcinoma Sub-classes

RRID:SCR_003010
Type: Tool

Proper Citation

Classification of Human Lung Carcinomas by mRNA Expression Profiling Reveals Distinct Adenocarcinoma Sub-classes (RRID:SCR_003010)

Resource Information

URL: http://www.broad.mit.edu/mpr/lung

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Description: Data set of a molecular taxonomy of lung carcinoma, the leading cause of cancer death in the United States and worldwide. Using oligonucleotide microarrays, researchers analyzed mRNA expression levels corresponding to 12,600 transcript sequences in 186 lung tumor samples, including 139 adenocarcinomas resected from the lung. Hierarchical and probabilistic clustering of expression data defined distinct sub-classes of lung adenocarcinoma. Among these were tumors with high relative expression of neuroendocrine genes and of type II pneumocyte genes, respectively. Retrospective analysis revealed a less favorable outcome for the adenocarcinomas with neuroendocrine gene expression. The diagnostic potential of expression profiling is emphasized by its ability to discriminate primary lung adenocarcinomas from metastases of extra-pulmonary origin. These results suggest that integration of expression profile data with clinical parameters could aid in diagnosis of lung cancer patients.

Synonyms: Cancer Genomics Publication

Resource Type: data set, data or information resource

Defining Citation: PMID:11707567

Keywords: molecular, taxonomy, lung, carcinoma, cancer, death, mrna, expression, sequence, data, adenocarcinoma, neuroendocrine, gene, type ii pneumocyte, analysis, metastasis, integration, mrna expression profiling

Related Condition: Lung cancer

Funding: NCI U01 CA84995

Resource Name: Classification of Human Lung Carcinomas by mRNA Expression Profiling Reveals Distinct Adenocarcinoma Sub-classes

Resource ID: SCR_003010

Alternate IDs: nif-0000-30292

Record Creation Time: 20220129T080216+0000

Record Last Update: 20250411T054821+0000

Ratings and Alerts

No rating or validation information has been found for Classification of Human Lung Carcinomas by mRNA Expression Profiling Reveals Distinct Adenocarcinoma Sub-classes.

No alerts have been found for Classification of Human Lung Carcinomas by mRNA Expression Profiling Reveals Distinct Adenocarcinoma Sub-classes.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Nilsson B, et al. (2007) Threshold-free high-power methods for the ontological analysis of genome-wide gene-expression studies. Genome biology, 8(5), R74.

Guo Y, et al. (2006) Towards a holistic, yet gene-centered analysis of gene expression profiles: a case study of human lung cancers. Journal of biomedicine & biotechnology, 2006(5), 69141.