

# Basics of Lung Cancer Pathology, Part 1: Histologic Subtypes of Non-Small Cell Lung Cancer



Interview with  
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GRACE

## 2004 WHO Classification of Lung Tumors

<b>NSCLC (87%)</b>			<b>SCLC (13%)</b>
<b>Adenocarcinoma (45%)</b>	<b>SCC (33%)</b>	<b>LCC (9%)</b>	
<b>Mixed Subtype</b>	Papillary	LCNEC Combined LCNEC	Combined SCLC
<b>Acinar</b>			
<b>Papillary</b>	Clear cell	Clear cell	
<b>BAC</b>		Basaloid	
Nonmucinous	Small cell	Lymphoepithelioma-like	
Mucinous			
Mixed			
<b>Solid</b>	Basaloid	LCC with rhabdoid phenotype	

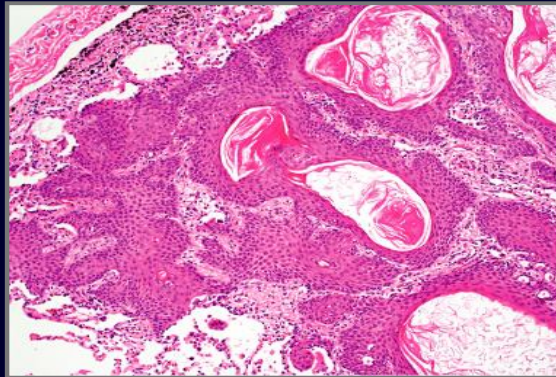
BAC=bronchioloalveolar carcinoma; LCC=large cell carcinoma; LCNEC=large cell neuroendocrine carcinoma; SCC=squamous cell carcinoma; SCLC=small cell lung cancer.

## Squamous Cell Carcinoma

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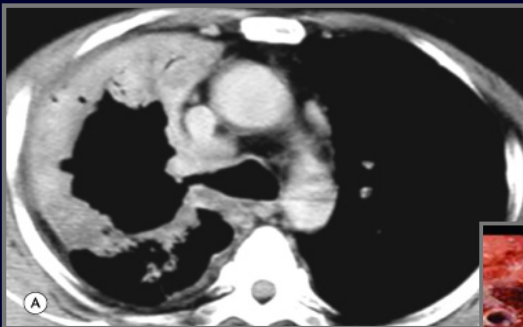
- Keratin production
  - Protects cell surfaces
  - Cells bound tightly together

Microscopic appearance of squamous cell carcinoma



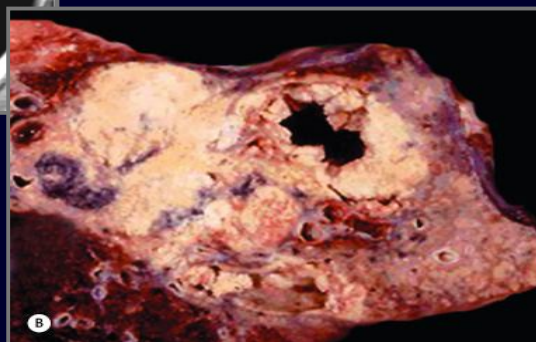
## Squamous Cell Carcinoma

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CT scan appearance of tumor with cavitation

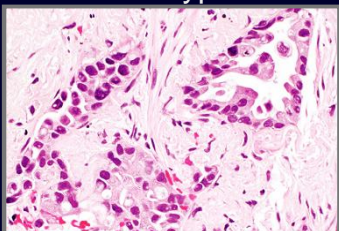
Actual appearance of tumor with cavitation



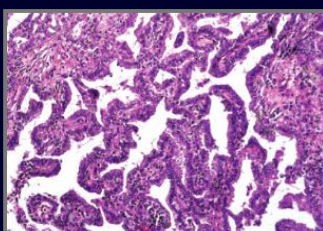
## Adenocarcinoma

- Mucin production
  - Functional cells with respect to production of cellular materials (i.e. enzymes).
  - Lines glands and ducts.

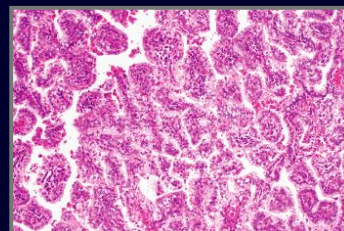
Acinar Subtype Adeno



Non-mucinous BAC



Papillary Adeno



## Percentage of Reported NSCLC Not Otherwise Specified (NOS) or "Other" Patients in Select Trials

	E4599	ARIES	AVAIL	NCI 7863†	ZODIAC	ZEAL	ZEST
NOS, n/N (%)	165/878 (19%)	349/1758 (20.1%)	--	40/94 (43%)	--	--	--
"Other"*	--	--	21/1043 (2%)		218/ 1391 (16%)	84/534 (16%)	227/1240 (18%)