

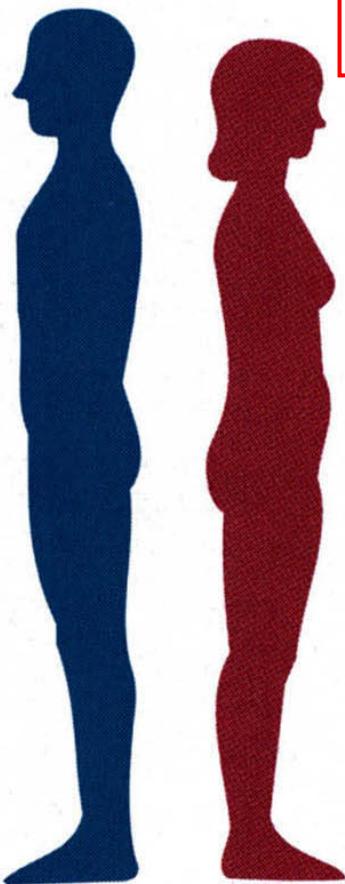


Julian Guitron, M.D., Division of Thoracic Surgery, University of Cincinnati

LUNG CANCER

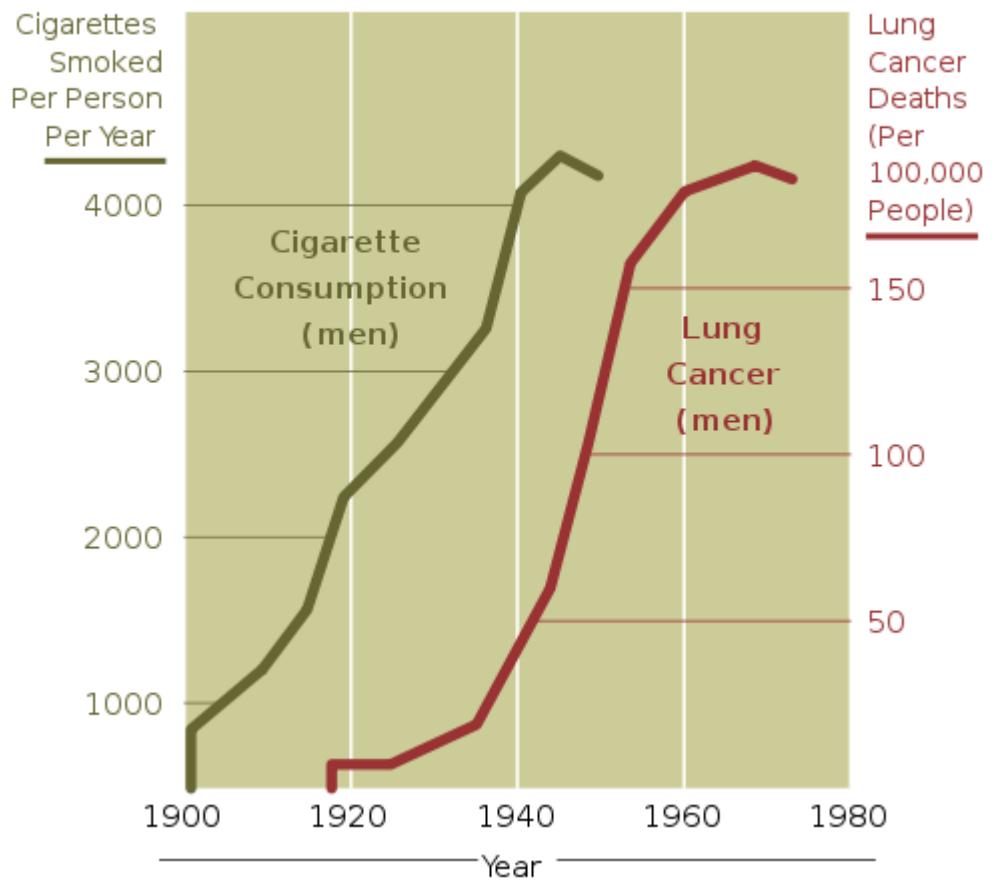
Estimated Deaths

Lung and Bronchus (31%)
Prostate (10%)
Colon and Rectum (10%)
Pancreas (5%)
Non-Hodgkin Lymphoma (4%)
Leukemia (4%)
Esophagus (4%)
Liver (3%)
Urinary Bladder (3%)
Kidney (3%)
All Other Sites (22%)



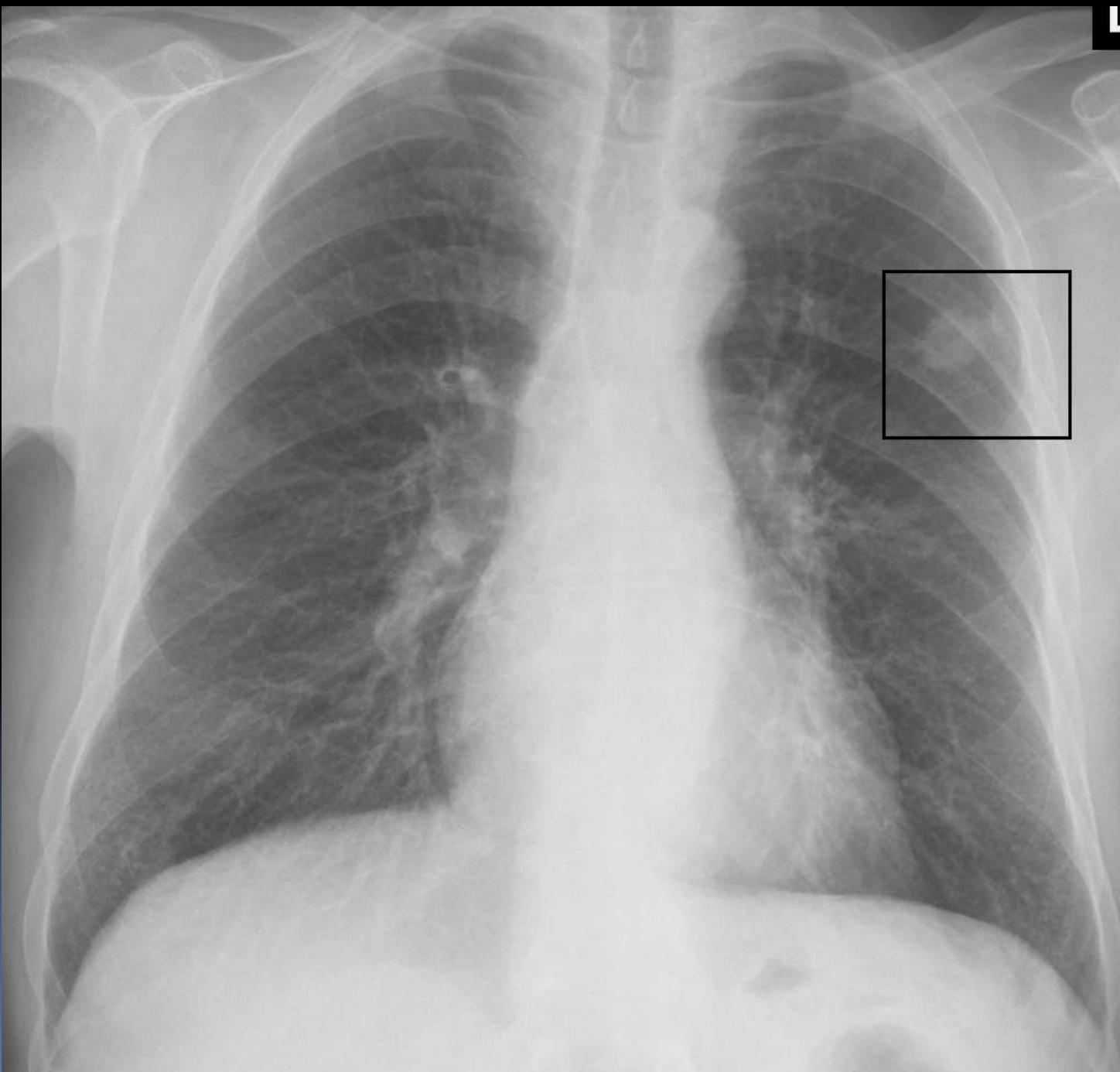
Lung and Bronchus (25%)
Breast (15%)
Colon and Rectum (11%)
Pancreas (6%)
Ovary (5%)
Non-Hodgkin Lymphoma (4%)
Leukemia (4%)
Uterine Corpus (3%)
Brain (2%)
Multiple Myeloma (2%)
All Other Sites (23%)

20-Year Lag Time Between Smoking and Lung Cancer



Case 1

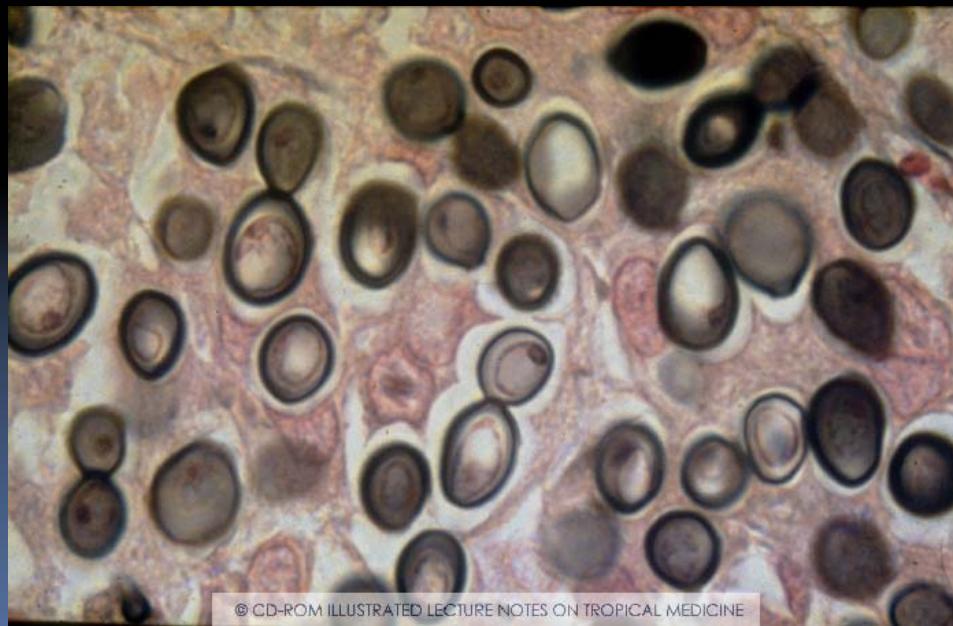
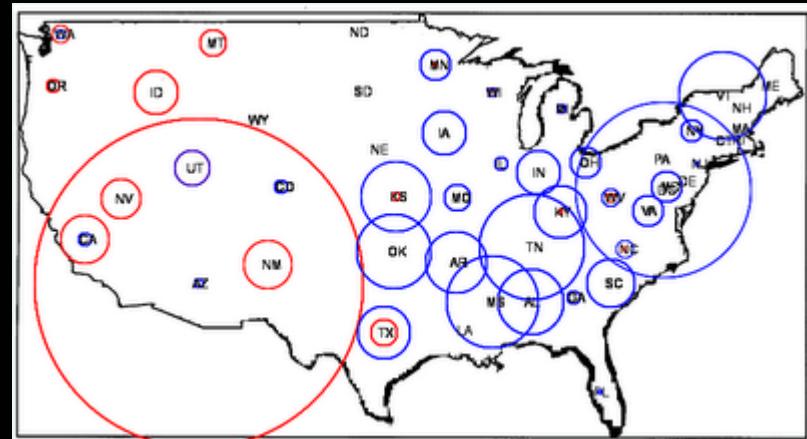
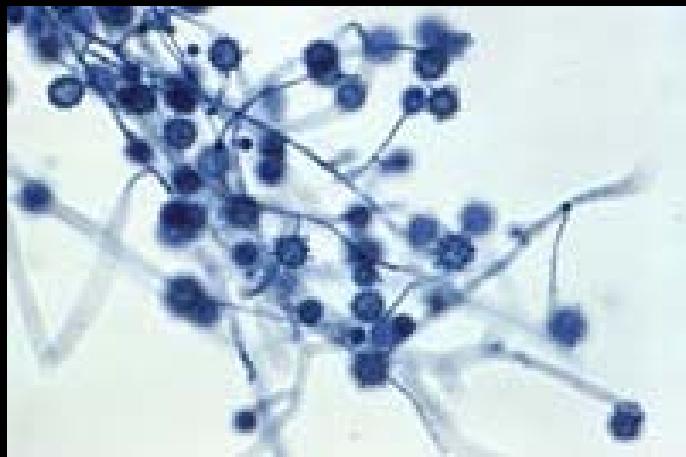
- 64 y/o malpractice lawyer with a 1.4cm nodule in his left upper lobe.
- Never smoker
- Born and always lived in the OH Valley



Case 1

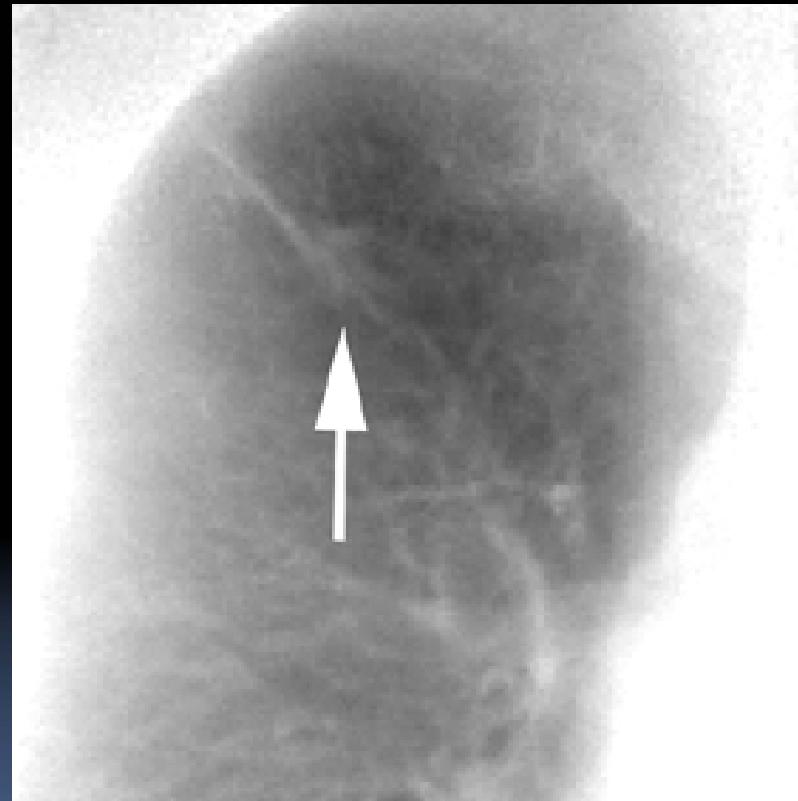
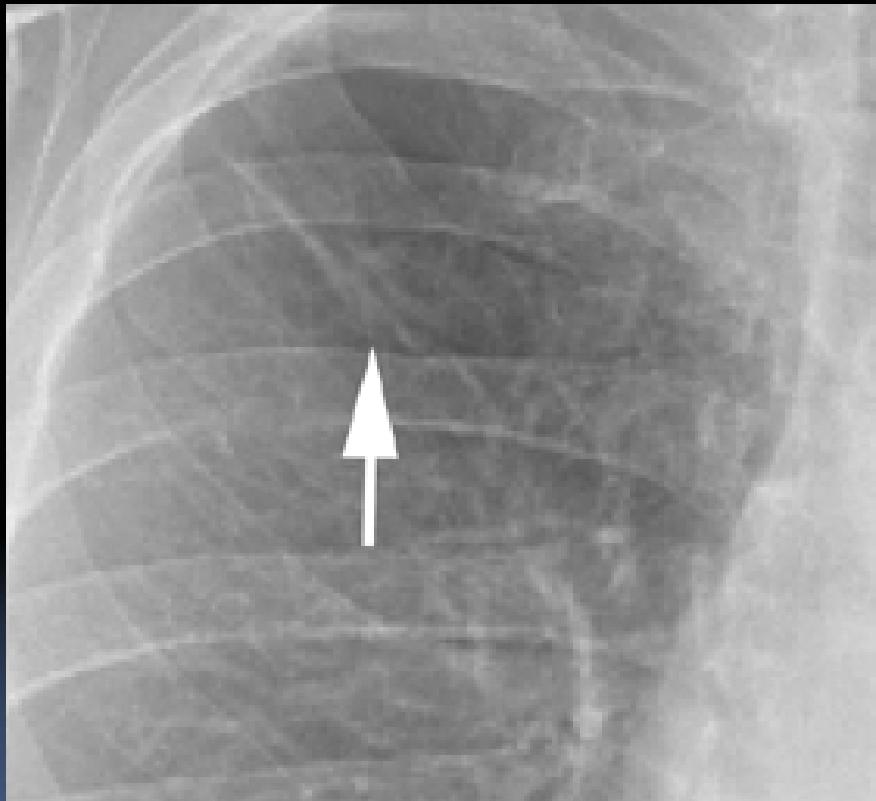




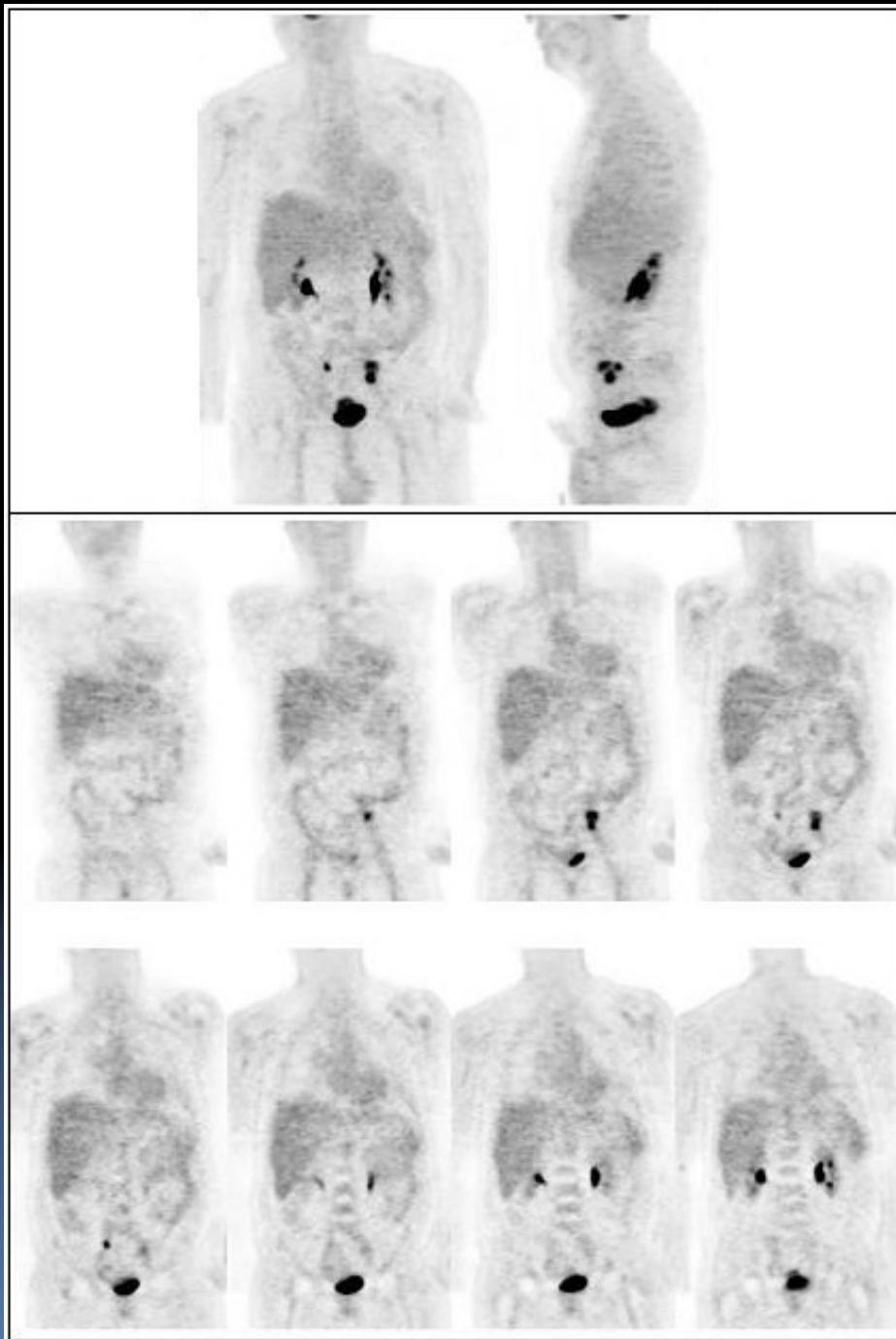


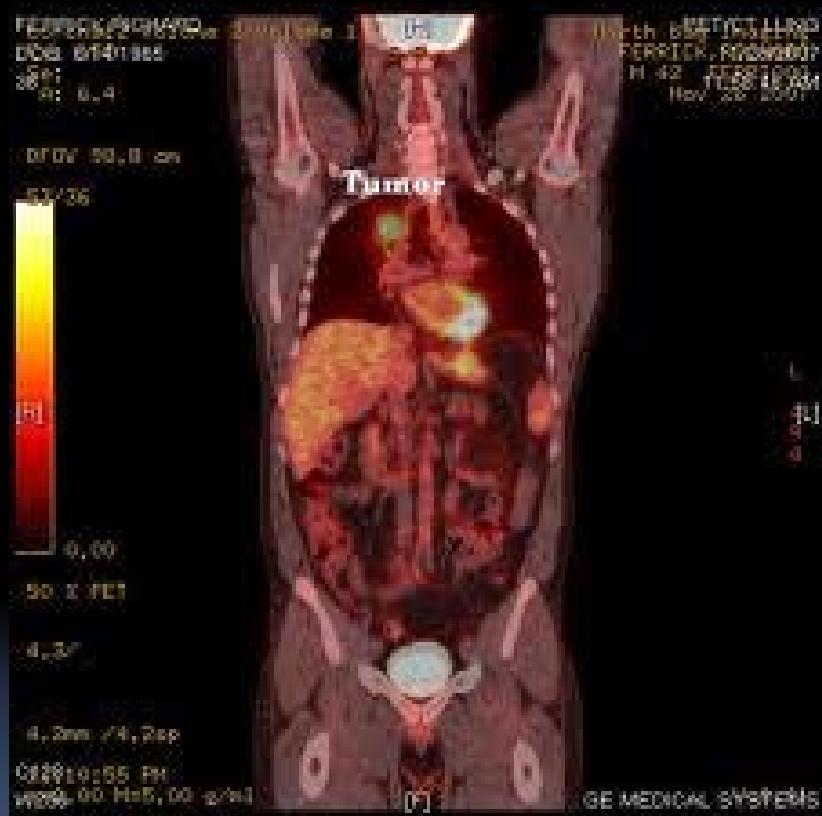
Case 2

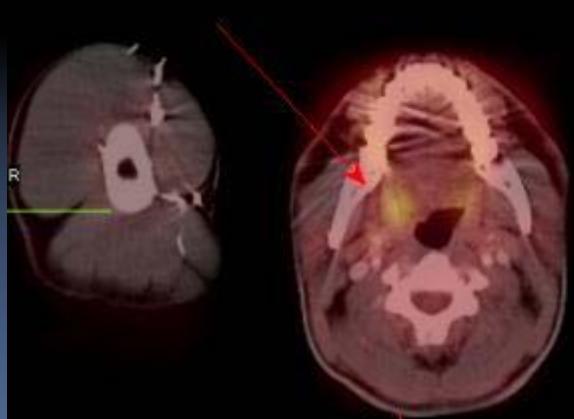
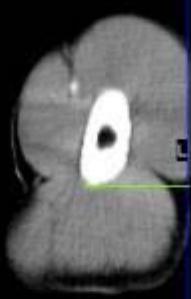
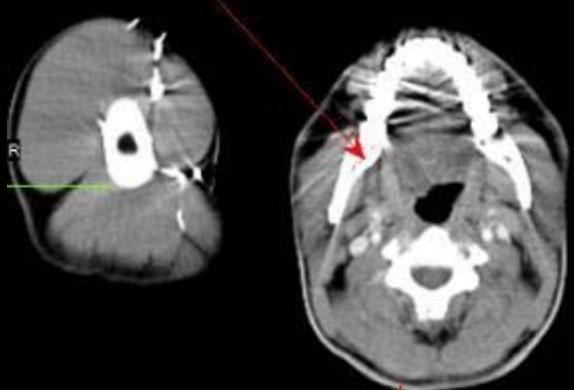
- 48 y/o F with an abnormal chest xray
- 40 pack-year history of smoking
- Asymptomatic











on room air=96%/HR=90. 2 puffs of Proventil given via aerochamber with 1 minute between puffs, 10 minutes elapsed before post tests. Patient given outpatient medication list. Patient reviewed list and reported no discrepancies.



	Baseline			Post Bronchodilator			
	<u>Actual</u>	<u>Pred</u>	<u>% Pred</u>	<u>LLN</u>	<u>Actual</u>	<u>% Chng</u>	<u>% Pred</u>
--- SPIROMETRY ---							
FVC (L)	5.03	5.08	99	4.09	5.21	3	102
FEV1 (L)	1.87	3.83	49	2.99	1.91	2	50
FEV1/FVC (%)	37	75	49	65	37	-1	49
FEF Max (L/sec)	3.94	9.61	41	7.15	4.25	8	44
FEF 25-75% (L/sec)	0.60	3.11	19	1.41	0.67	11	21
--- LUNG VOLUMES ---							
TLC (Pleth) (L)	10.80	7.53	143	6.13			
SVC (L)	4.87	5.02	97				
ERV (L)	2.01	1.23	164				
IC (L)	2.86	3.79	75				
RV (Pleth) (L)	5.93	2.51	236	1.69			
RV/TLC (Pleth) (%)	55	38	145	27			
Raw (cmH2O/L/s)	1.54	1.45	106	0.66			
Gaw (L/s/cmH2O)	0.65	1.03	63				
--- DIFFUSION ---							
DLCOunc (ml/min/mmHg)	22.90	23.65	97	15.66			
VA (L)	8.09	7.21	112	5.84			
DL/VA (ml/min/mmHg/L)	2.83	4.10	69	2.64			
IVC (L)	4.39						

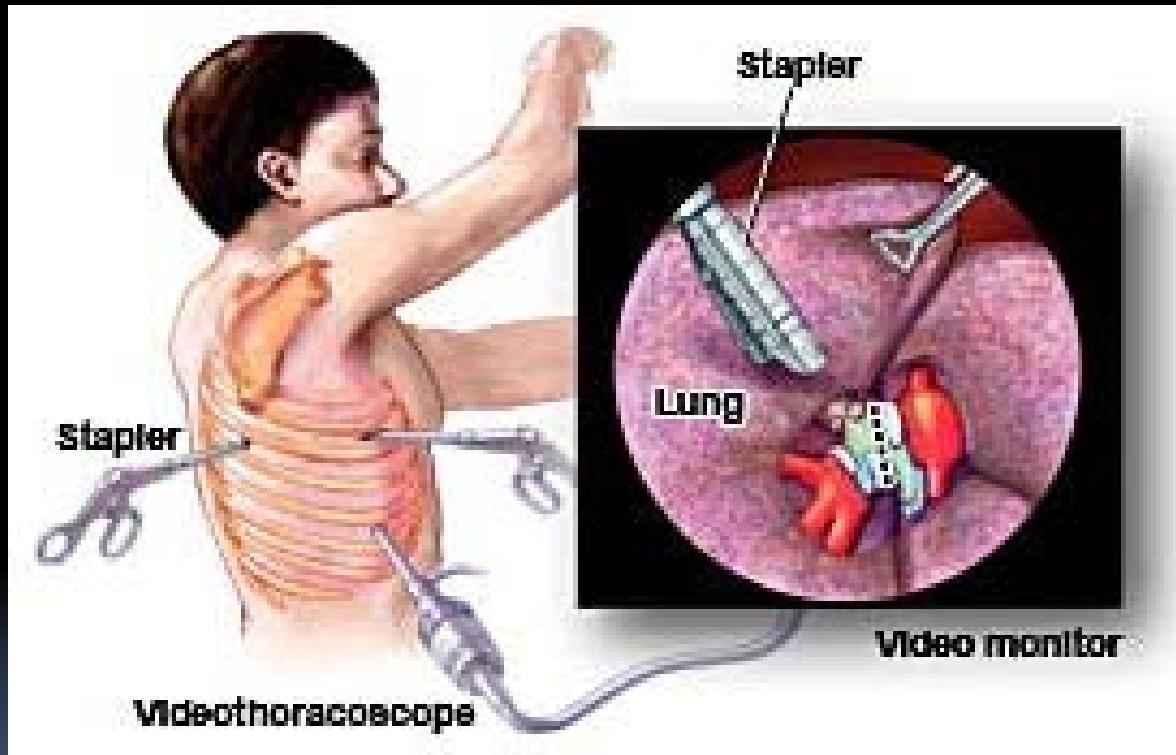


on room air=96%/HR=90. 2 puffs of Proventil given via aerochamber with 1 minute between puffs, 10 minutes elapsed before post tests. Patient given outpatient medication list. Patient reviewed list and reported no discrepancies.

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DL/VA (ml/min/mmHg/L)	2.83	4.10	69	2.64			
IVC (L)	4.39						

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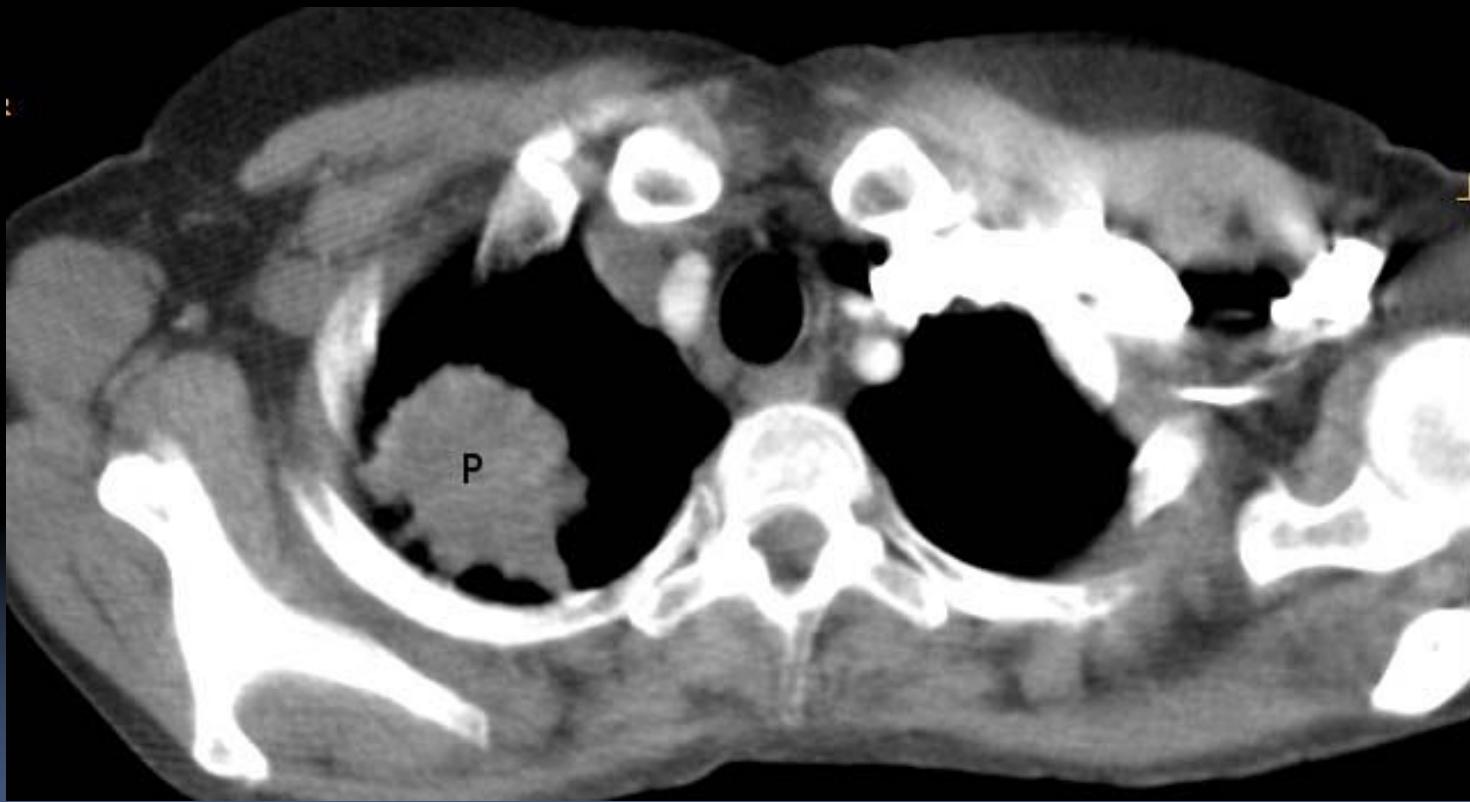
	Baseline				Post Bronchodilator		
	<u>Actual</u>	<u>Pred</u>	<u>% Pred</u>	<u>LLN</u>	<u>Actual</u>	<u>% Chng</u>	<u>% Pred</u>
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--- DIFFUSION ---							
DLCO _{unc} (ml/min/mmHg)	22.90	23.65	97	15.66			
VA (L)	8.09	7.21	112	5.84			
DL/VA (ml/min/mmHg/L)	2.83	4.10	69	2.64			
IVC (L)	4.39						



Case 3

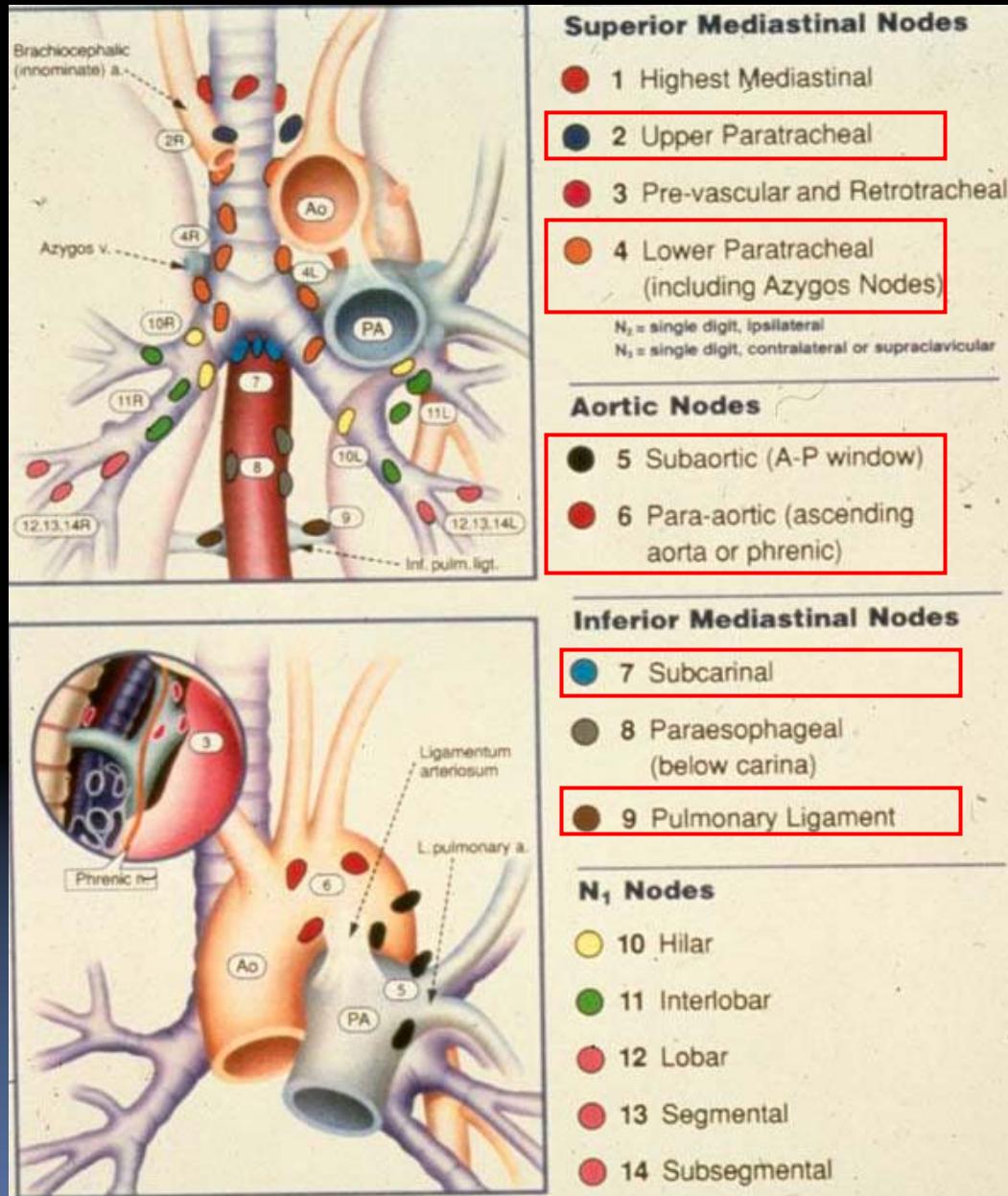
- 55 y/o M with right shoulder pain
- Lifetime smoker
- Moderate ETOH intake
- Avoids MDs/hospitals at all costs





T/M	Subgroup	N0	N1	N2	N3
T1	T1a	Ia	IIa	IIIa	IIIb
	T1b	Ia	IIa	IIIa	IIIb
T2	T2a	Ib	IIa	IIIa	IIIb
	T2b	IIa	IIb	IIIa	IIIb
T3	T3 _{>7}	IIb	IIIa	IIIa	IIIb
	T3 _{Inv}	IIb	IIIa	IIIa	IIIb
	T3 _{Satell}	IIb	IIIa	IIIa	IIIb
T4	T4 _{Inv}	IIIa	IIIa	IIIb	IIIb
	T4 _{Ipsi Nod}	IIIa	IIIa	IIIb	IIIb
M1	M1a _{Contra Nod}	IV	IV	IV	IV
	M1a _{Pl Disem}	IV	IV	IV	IV
	M1b	IV	IV	IV	IV

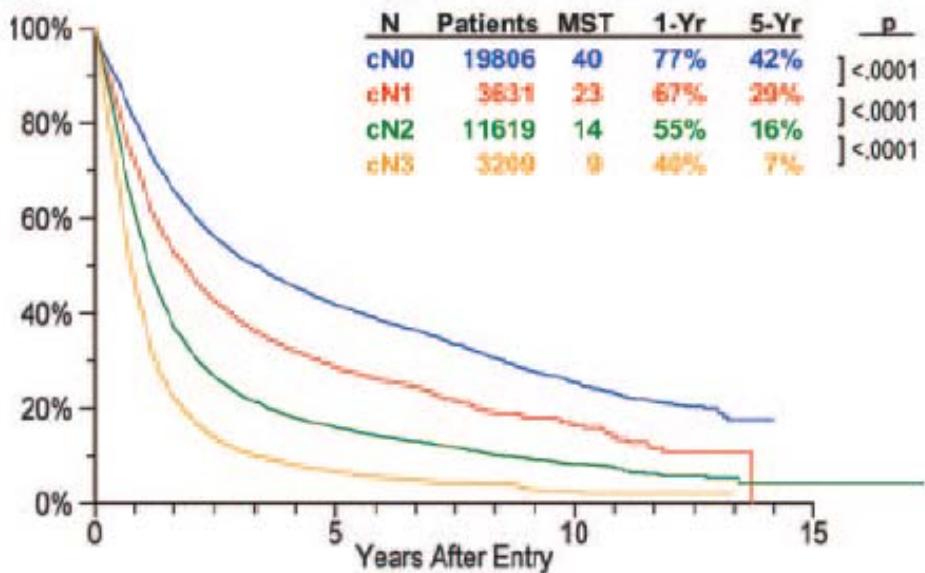
T/M	Subgroup	N0	N1	N2	N3
T1	T1a	Ia	IIa	IIIa	IIIb
	T1b	Ia	IIa	IIIa	IIIb
T2	T2a	Ib	IIa	IIIa	IIIb
	T2b	IIa	IIb	IIIa	IIIb
T3	T3 _{>7}	IIb	IIIa	IIIa	IIIb
	T3 Inv	IIb	IIIa	IIIa	IIIb
	T3 Satell	IIb	IIIa	IIIa	IIIb
T4	T4 Inv	IIIa	IIIa	IIIb	IIIb
	T4 Ipsi Nod	IIIa	IIIa	IIIb	IIIb
M1	M1a Contra Nod	IV	IV	IV	IV
	M1a Pl Disem	IV	IV	IV	IV
	M1b	IV	IV	IV	IV



N₂ LNs

All single-digit stations

(ipsilateral,
otherwise N₃)

A**B**