

LUNG CANCER



Symptoms that best predict lung cancer

- haemoptysis
- weight loss or fatigue, particularly in smoker or ex-smoker
- loss of appetite
- unexplained bone or chest pain/shoulder pain
- new and progressive dyspnoea
- new and persistent cough/change in cough
- new and persistent hoarseness
- persistent pneumonia.

Figure 1: Probability of cancer in NON-smokers if clinical features present

Lung cancer clinical features NON-smokers (including ex-smokers)									
Cough	Fatigue	Dyspnoea	Chest pain	Loss of weight	Loss of appetite	Thrombocytosis	Abnormal spirometry	Haemoptysis	PPV= Positive predictive value (%) or probability of cancer
0.40	0.43	0.66	0.82	1.1	0.87	1.6	1.6	2.4	PPV as a single clinical feature
0.58*	0.63	0.79	0.76	1.8	1.6	2.0	1.2	2.0	Cough
	0.57*	0.89	0.84	1.0	1.2	1.8	4.0	3.3	Fatigue
		0.88*	1.2	2.0	2.0	2.0	2.3	4.9	Dyspnoea
			0.95*	1.8	1.8	2.0	1.4	5.0	Chest pain
				1.2*	2.3	6.1	1.5	9.2	Loss of weight
					1.7*	0.9	2.7	>10	Loss of appetite
							3.6	>10	Thrombocytosis
								>10	Abnormal spirometry
								17*	Haemoptysis

- >5% probability of cancer
- 2-5% probability of cancer
- 1-2% probability of cancer
- <1% probability of cancer
- * Second presentation
- denotes data unknown

Figures 1 and 2 show the probability of lung cancer for individual and pairs of clinical features, including second* presentation in non-smokers (including ex-smokers) and smokers respectively.

For example, the probability of lung cancer in a non-smoker: Haemoptysis = 2.4% / Haemoptysis + weight loss = 9.2%

The probability of lung cancer for a smoker: Haemoptysis = 4.5% / Haemoptysis + dyspnoea = 6.9%

Two separate episodes of haemoptysis: Non-smoker: 17% / Smoker: 12%

Probabilities highlighted in red are >5%, and urgent referral should be considered.

Risk factors

- current smoker or ex-smoker
- increasing age
- exposure to secondhand smoke
- occupational exposures e.g. asbestos, diesel engine exhaust
- previous lung diseases including COPD or ILD
- family history of lung cancer.

Implications for practice

- Perform early chest X-ray in those with relevant symptoms.
- Conduct a full blood count in people with possible symptoms of lung cancer.
- Contrast CT of the chest if there is a strong clinical suspicion of lung cancer.

Diagnostic pathways

Refer to Cancer Australia's 'Investigating symptoms of lung cancer: a guide for GPs' for investigation pathways.

Refer all suspected lung cancer within two weeks to a respiratory physician affiliated with a lung cancer multidisciplinary team (MDT).
For more information, visit clinicianassistwa.org.au

Figure 2: Probability of cancer in smokers if clinical features present

Lung cancer clinical features for smokers									
Cough	Fatigue	Dyspnoea	Chest pain	Loss of weight	Loss of appetite	Thrombocytosis	Abnormal spirometry	Haemoptysis	PPV= Positive predictive value (%) or probability of cancer
0.9	0.8	1.2	1.3	2.1	1.8	4.2	4.0	4.5	PPV as a single clinical feature
1.3*	1.0	1.4	0.9	2.3	2.8	6.5	3.6	3.9	Cough
	1.2*	1.4	1.3	2.0	2.3	2.4	>10	6.1	Fatigue
		1.5*	2.2	3.1	5.5	2.4	>10	6.9	Dyspnoea
			1.4*	4.4	7.6	>10	>10	4.1	Chest pain
				1.7*	5.0	>10	>10	□	Loss of weight
					2.7*	□	□	□	Loss of appetite
							□	12*	Haemoptysis

View more FCE resources at
findcancerearly.com.au/gp/

Partner:



Government of Western Australia
North Metropolitan Health Service

