

TUMOUR MARKERS

PATHOLOGY SOLUTIONS ARE IN OUR DNA



Tumour Markers are biochemical substances either produced by tumour cells or produced in response to the presence of a tumour. The list below reflects the markers that occur most commonly for the indicated tumour types.

TUMOUR TYPE	TUMOUR MARKER
Breast	CEA, CA 15-3
Bladder	CEA
Biliary tract	CA 19-9
Colon	Stool occult blood, CEA, CA 19-9
Cervix	SCC, CEA
Choriocarcinoma	HCG
Carcinoid	24-hour urine 5HIAA, NSE, Chromogranin A, Serotonin
Germ cell	AFP, HCG, LDH (follow up)
Head and neck	SCC
Liver	AFP, CEA
Lung – small cell lung cancer	NSE
Lung – non-small cell lung cancer	CEA, SCC
Lymphoma, leukaemia	Ferritin, Beta-2-microglobulin, LDH (follow up)
Melanoma	S-100
Myeloma	Paraproteins: Serum protein electrophoresis, urine Bence Jones protein Beta-2-microglobulin, free light chains (serum and urine)
Neuroblastoma	Urine HVA, NSE, Chromogranin A
Neuroendocrine tumours	NSE, Chromogranin A
Oesophagus	SCC
Ovary	CA 125 and HE4 with ROMA-value (most common) Others: CA 72-4, CEA, CA 19-9, CA 15-3
Pancreas	CA 19-9, CEA, CA 72-4 (less common)
Prostate	PSA, free PSA
Phaeochromocytoma	Urine metanephrines and normetanephrines, plasma metanephrines and normetanephrines, Chromogranin A
Stomach	CA 72-4
Testis	AFP, HCG, LDH
Thyroid	Thyroglobulin, CEA, Calcitonin
Medullary Thyroid Carcinoma	Calcitonin
Endometrium	CA 125
Gastrointestinal tumours	Gut hormones: Gastrointestinal hormone profile

Please note: An increased tumour marker cannot, with certainty, confirm the presence of a tumour. Similarly, a normal value does not guarantee the absence of one. With the exception of PSA and stool occult blood, tumour markers are not recommended for screening purposes; and should always be interpreted in conjunction with medical history and physical examination, as well as other laboratory and/or imaging tests.