

# Oncological Disease-Tumor Markers

## Gastrointestinal

Tumor Type	Marker	Recommended Use
Hepatic	AFP	Monitoring
		Early detection in high-risk patients
	Helicobacter pylori	Environmental risk factor
Pancreatic (ductal adenocarcinoma)	CA19-9	Monitoring
		Diagnosis
Colorectal	CEA	Monitoring
		Monitoring advanced disease
		Prognosis

## Neuroendocrine

Tumor Type	Marker	Recommended Use
	Prolactin (serum)	Diagnosis
Carcinoid	5-HIAA (urine)	Diagnosis
		Monitoring for specific tumor
	Serotonin (serum)	Diagnosis
	Gastrin (serum)	Diagnosis and monitoring
Gastrinoma	Gastrin (serum)	Diagnosis and monitoring
Pheochromocytoma	Metanephrines (plasma, urine)	Diagnosis and monitoring
	Catecholamines (urine)	Diagnosis and monitoring
Insulinoma	Insulin (serum)	Diagnosis and monitoring
	C-peptide (serum)	Diagnosis and monitoring
Pituitary	Growth hormone (serum)	Diagnosis and monitoring
	IGF-1 (serum)	Diagnosis and monitoring
	Prolactin (serum)	Diagnosis and monitoring
	LH/FSH (serum)	Diagnosis and monitoring
	TSH (serum)	Diagnosis and monitoring
	ACTH (serum)	Diagnosis and monitoring
Pancreatic neuroendocrine carcinoma	Pancreatic polypeptide (serum)	Diagnosis and monitoring
	Calcitonin (serum)	Diagnosis and monitoring

## Lung

Tumor Type	Marker	Recommended Use
Small cell (SCLC)	NSE (serum,)	Monitoring
		Prognosis
Non-small cell (NSCLC)	CEA	Monitoring, prognosis, detecting relapse
Mesothelioma	CEA	Diagnosis

## Female Gynecologic/Genitourinary

Tumor Type	Marker	Recommended Use
Breast	CA 15-3	Monitoring advanced disease
	CEA	Monitoring advanced disease
Ovarian	SCC Ag	Monitoring
	CA 125	Monitoring
		Differential diagnosis is suspicious pelvic mass
		Detection of recurrence
	Prognosis	
Gestational trophoblastic	$\beta$ hCG	Diagnosis, recurrence
	$\beta$ hCG	Monitoring
		Diagnosis

## Male Genitourinary

Tumor Type	Marker	Recommended Use
Prostate	PSA	Screening
		Staging and prognosis
		Monitoring
		Follow-up and negative biopsy
Germ cell (testicular)	$\beta$ hCG and AFP	Diagnosis and differential diagnosis of nonseminomatous germ cell cancer of the testes
		Staging and prognosis
		Monitoring
		Detecting recurrence

## Childhood Tumors

Tumor Type	Marker	Recommended Use
Neuroblastoma	NSE	Prognosis
	VMA, catecholamines	Diagnosis-monitoring

## Thyroid/parathyroid

Tumor Type	Marker	Recommended Use
Well-differentiated	Thyroglobulin (serum)	Diagnosis, monitoring
	Thyroglobulin	Diagnosis
Medullary thyroid carcinoma	Calcitonin	Monitoring, diagnosis
	CEA	Diagnosis, monitoring