


Accredited to
ISO 15189:2022

Prostate Specific Antigen (PSA)

Synonyms

PSA

Clinical Indication

In combination with digital rectal examination PSA can aid diagnosis of prostate cancer in symptomatic patients. PSA is also useful for monitoring patients with diagnosed pancreatic cancer.

Part of Profile / See Also

N/A

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request.

Turnaround Time

Same Day

Patient Preparation

Urological manipulations affect PSA levels and if possible sample should be taken before procedure. Effects are as follows:

| | |
|------------------------|--|
| DRE / Prostate massage | May cause minor increases in some patients, take sample for PSA before procedure. |
| Ejaculation | Results conflicting but may increase PSA levels. |
| TURP / Needle Biopsy | Increases PSA levels significantly. Wait at least 6 weeks before taking sample for PSA levels. |
| Ultrasound | Increases PSA levels in a minority of patients. |
| Cystoscopy | Flexible cystoscopy does not appear to increase PSA levels but rigid cystoscopy may increase levels. |

Sample Requirements

Specimen Type

Serum

Volume

2 ml

Container



Yellow top (SST) tube

Reference Range & Units

| Age (Male) | Threshold: |
|-------------|------------|
| ≤50 years | ≤2.5ng/ml |
| 50-69 years | ≤3.0ng/ml |
| 70-79 years | ≤5.0ng/ml |
| ≥80 years | ≤20.0ng/ml |

Interferences

None

Interpretation & Clinical
Decision Value (if applicable)

Comment on All patients 80 years and above:

If PSA is >20ng/ml please refer urgently. A single PSA only is required for referral provided urinary tract infection (UTI) has been excluded. Please check for UTI at time of PSA test.

If PSA is 7.5 ng/ml to 20ng/ml and patient has red flags please refer urgently.

If patient is asymptomatic, repeat PSA in 6 months and refer if PSA >20 ng/mL, develops red flag symptoms or PSA has more than doubled.

Comment on ALL Under 80 years old:

Please see age specific reference ranges. If PSA is >20 ng/mL please refer urgently. A single PSA only is required for referral provided urinary tract infection (UTI) has been excluded. Please check for UTI at time of PSA test (GIRFT, 2024).

Half-life in serum - Approx. 2.5 days after radical prostatectomy. Half-life after radiotherapy may be many months.

References
Test code

PSA

Lab Handling

Analysed from primary tube and stored at 4°C.