

## **KOS Diagnostic Lab**

(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mr. KEWAL PARKASH

**AGE/ GENDER** :81 YRS/MALE **PATIENT ID** : 1648862

**COLLECTED BY** REG. NO./LAB NO. : 012410210047

REFERRED BY **REGISTRATION DATE** : 21/Oct/2024 10:56 AM BARCODE NO. :01519293 **COLLECTION DATE** : 21/Oct/2024 10:59AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 21/Oct/2024 12:18PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit **Biological Reference interval** 

#### **VITAMINS**

#### VITAMIN D/25 HYDROXY VITAMIN D3

VITAMIN D (25-HYDROXY VITAMIN D3): SERUM by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

25.1<sup>L</sup>

ng/mL

**DEFICIENCY:** < 20.0

**INSUFFICIENCY: 20.0 - 30.0 SUFFICIENCY: 30.0 - 100.0** 

**TOXICITY: > 100.0** 

**INTERPRETATION:** 

DEFICIENT:	< 20	ng/mL
INSUFFICIENT:	21 - 29	ng/mL
PREFFERED RANGE:	30 - 100	ng/mL
INTOXICATION:	> 100	ng/mL

1. Vitamin D compounds are derived from dietary ergocalciferol (from plants, Vitamin D2), or cholecalciferol (from animals, Vitamin D3), or by conversion of 7- dihydrocholecalciferol to Vitamin D3 in the skin upon Ultraviolet exposure.

2.25-OH--Vitamin D represents the main body resevoir and transport form of Vitamin D and transport form of Vitamin D, being stored in adipose tissue and tightly bound by a transport protein while in circulation.

3. Vitamin D plays a primary role in the maintenance of calcium homeostatis. It promotes calcium absorption, renal calcium absorption and phosphate reabsorption, skeletal calcium deposition, calcium mobilization, mainly regulated by parathyroid harmone (PTH).

4. Severe deficiency may lead to failure to mineralize newly formed osteoid in bone, resulting in rickets in children and osteomalacia in adults.

#### **DECREASED:**

- 1.Lack of sunshine exposure.
- 2.Inadequate intake, malabsorption (celiac disease)
  3.Depressed Hepatic Vitamin D 25- hydroxylase activity
- 4. Secondary to advanced Liver disease
- 5. Osteoporosis and Secondary Hyperparathroidism (Mild to Moderate deficiency)
- 6.Enzyme Inducing drugs: anti-epileptic drugs like phenytoin, phenobarbital and carbamazepine, that increases Vitamin D metabolism.
- 1. Hypervitaminosis D is Rare, and is seen only after prolonged exposure to extremely high doses of Vitamin D. When it occurs, it can result in severe hypercalcemia and hyperphophatemia.

CAUTION: Replacement therapy in deficient individuals must be monitored by periodic assessment of Vitamin D levels in order to prevent hypervitaminosis D

NOTE:-Dark coloured individuals as compare to whites, is at higher risk of developing Vitamin D deficiency due to excess of melanin pigment which interefere with Vitamin D absorption.



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#### **TUMOUR MARKER**

### PROSTATE SPECIFIC ANTIGEN (PSA) - TOTAL

PROSTATE SPECIFIC ANTIGEN (PSA) - TOTAL: 1.35

ng/mL 0.0 - 4.0

by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)

#### **INTERPRETATION:**

#### NOTE:

- 1. This is a recommended test for detection of prostate cancer along with Digital Rectal Examination (DRE) in males above 50 years of age.
- 2. False negative / positive results are observed in patients receiving mouse monoclonal antibodies for diagnosis or therapy
- 3. PSA levels may appear consistently elevated / depressed due to the interference by heterophilic antibodies & nonspecific protein binding
- 4. Immediate PSA testing following digital rectal examination, ejaculation, prostatic massage, indwelling catheterization, ultrasonography and needle biopsy of prostate is not recommended as they falsely elevate levels
- 5. PSA values regardless of levels should not be interpreted as absolute evidence of the presence or absence of disease. All values should be correlated with clinical findings and results of other investigations
- 6. Sites of Non-prostatic PSA production are breast epithelium, salivary glands, peri-urethral & anal glands, cells of male urethra & breast milk
- 7. Physiological decrease in PSA level by 18% has been observed in hospitalized / sedentary patients either due to supine position or suspended sexual activity
- 8. The concentration of PSA in a given specimen, determined with assays from different manufacturers, may not be comparable due to differences in assay methods, calibration, and reagent specificity.

#### RECOMMENDED TESTING INTERVALS

- 1. Preoperatively (Baseline)
- 2-4 Days Post operatively
- 3. Prior to discharge from hospital

Monthly Follow Up if levels are high and showing a rising trend

POST SURGERY	FREQUENCY OF TESTING
1st Year	Every 3 Months
2 <sup>nd</sup> Year	Every 4 Months
3 <sup>rd</sup> Year Onwards	Every 6 Months

- 1. An aid in the early detection of Prostate cancer when used in conjunction with Digital rectal examination in males more than 50 years of age and in those with two or more affected first degree relatives.
- 2. Followup and management of Prostate cancer patients.
- 3. Detect metastatic or persistent disease in patients following surgical or medical treatment of Prostate cancer

#### **INCREASED LEVEL:**

- 1. Prostate cancer
- 2. Benign Prostatic Hyperplasia
- 3. Prostatitis



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4. Genitourinary infections

**End Of Report** 



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