آغا خان یونیورسٹی ہسپتال، کراچی
The Aga Khan University Hospital, Karachi

Serum PIVKA-II: An Emerging Biomarker for HCC Detection and Monitoring

Department of Pathology and Laboratory Medicine

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The information contained in this flyer is intended for healthcare professionals.

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What's New

The Aga Khan University Hospital Clinical Laboratory is introducing Protein Induced by Vitamin K Absence or Antagonist-II (PIVKA-II), also known as Des-gamma-carboxy prothrombin testing. PIVKA-II is an advanced biomarker that complements Alpha Fetoprotein (AFP) for the early detection and monitoring of hepatocellular carcinoma (HCC), including AFP-negative cases.

Introduction:

PIVKA-II is an abnormal, non-functional form of prothrombin produced when vitamin K–dependent carboxylation is disrupted—commonly elevated in hepatocellular carcinoma due to malignant hepatocyte dysfunction. Clinically, PIVKA-II serves as a specific serum biomarker that complements AFP by improving early HCC detection, particularly in AFP-negative patients, and aids in monitoring treatment response and disease progression.

Principle:

Electrochemiluminescence Immunoassay (ECLIA)

Intended Use:

- Risk assessment of patients with chronic liver disease
- Aiding in the post-therapy monitoring of HCC patients if the Des-γ-carboxy Prothrombin level was elevated prior to therapy

Important Note:

- PIVKA-II may be affected by vitamin K status, warfarin therapy, biliary obstruction, and renal dysfunction; it should be interpreted with clinical correlation
- Results are assay-dependent and cannot be compared across methods

Specimen Type:

3-5 cc clotted blood or 2-3 cc serum

Reference Range:

<28.4 ng/mL

Schedule:

Monday to Saturday; same day reporting, cut-off 11:00 AM

Charges:

PKR 6000/=

**Revisions in charges applicable*

For more information please call: 021 3486 1620
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