

P3NP ELISA.

MARKER FOR FIBROTIC ACTIVITY.



IVD P3NP ELISA – A RELIABLE TOOL FOR ASSESSING LIVER FIBROSIS IN METHOTREXATE-TREATED PATIENTS

P3NP (PIIINP) is one of the most studied biomarkers for liver fibrosis since the first development of a P3NP radioimmunoassay in 1979¹. Over the past 45 years the quantitative determination of P3NP has proven to be a minimally invasive biomarker to detect fibrotic processes especially in the liver.

This advantageous effect has led to the use of P3NP as a biomarker for occurrence of liver fibrosis activity for psoriasis patients treated with methotrexate (MTX) to reduce the need to do liver biopsies², which is a highly invasive procedure.

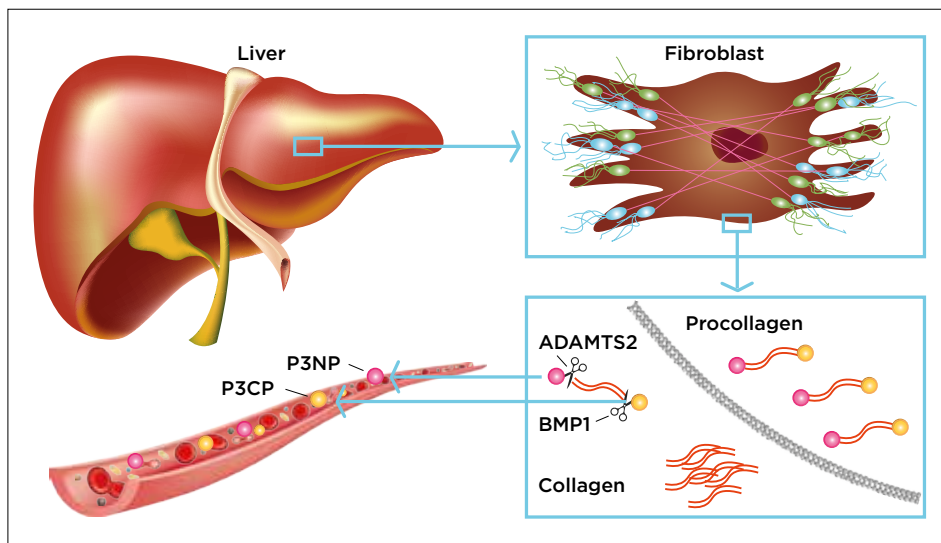


Figure: Measuring P3NP in blood is the direct mirror of collagen deposition in tissue as every P3NP molecule reflects one collagen molecule.

P3NP biology.

Procollagen III N-terminal Propeptide (PIIINP) is released from the precursor peptide during the synthesis and deposition of type III collagen. The increase of PIIINP (P3NP) in the bloodstream therefore is an image of collagen deposition in tissues.

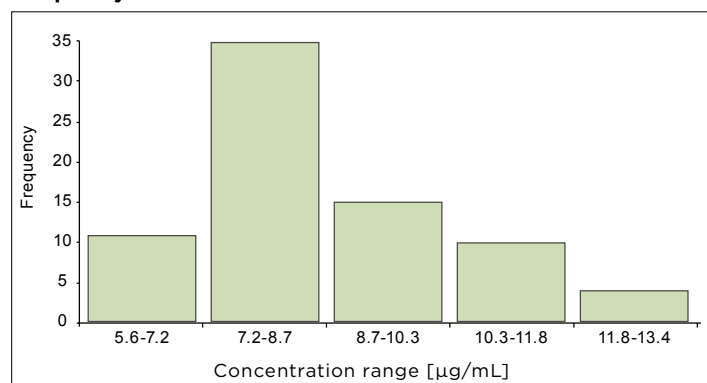
Clinical guidelines recommend the measurement of P3NP.

The EuroGuiDerm Guideline³ for the systemic treatment of psoriasis vulgaris recommends to measure

regularly P3NP, when patients are treated with methotrexate (MTX) as one of the important side effects of MTX treatment is liver fibrosis and cirrhosis in rare cases. Therefore, it is recommended to measure P3NP before treatment and also every 3 months afterwards during the treatment (see table next page).

The European guidelines have been transferred to local guidelines in Europe such as in Spain, Germany, France, Italy⁴, Denmark either unchanged or a little modified like in France where they recommend every 6-12 months intervals.

Frequency distribution



Case study of kit implementation.

The Karolinska University Hospital implemented the kit using the Tecan EVOlyzer[®]. The ease of automation of the P3NP ELISA was one of the main reasons for the Karolinska University Hospital's switch from RIA to ELISA.

During validation of the method on the EVOlyzer[®] normal values were determined and the cut-off was set at 11.7 µg/mL (95-%ile).

Recommended laboratory controls (MTX-Treatment)

Parameter*	Period in weeks/months			
	Pretreatment	Within two weeks	First 2 months: 1x/4 weeks	Thereafter, every 3 month
Blood count	x	x	x	
Liver enzymes**	x		x	
Serum creatinine	x		x	
Urine status	x			
Pregnancy test (urine or blood)	x			
HBV/HCV	x			
HIV	x			
Serum albumin***	x		x	x
PIIINP where available	x		Every 3 months****	

Not all tests may be necessary for all patients. Patient history, risk exposure and patient characteristics have to be taken into account. Further specific testing may be required according to clinical signs, risk, and exposure.

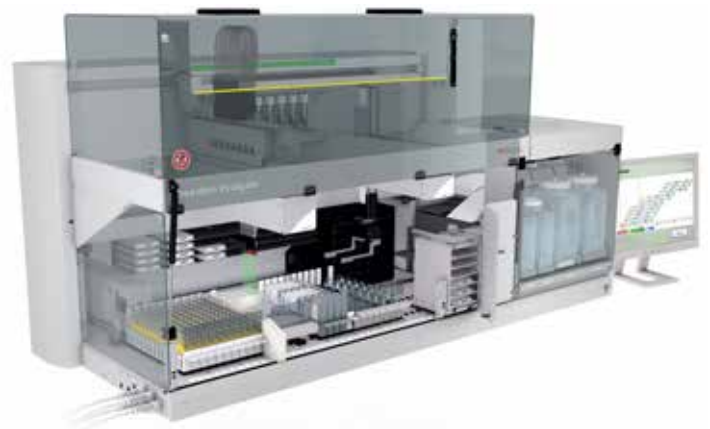
P3NP ELISA – Reliable, Scalable, and Patient-Friendly

- **Trust your results** – Deliver precise and reproducible measurements with a non-radioactive P3NP single parameter test.
- **Scale Your Workflow** – Whether your lab processes a few samples or high-throughput batches, P3NP ELISA adapts to your needs seamlessly.
- **Less Invasive, More Patient-Friendly** – Avoid unnecessary biopsies with a simple, reliable blood test.

With P3NP ELISA, you get **trusted results, streamlined efficiency, and a better experience for both labs and patients.**

PRODUCTS

30176061
P3NP ELISA



References

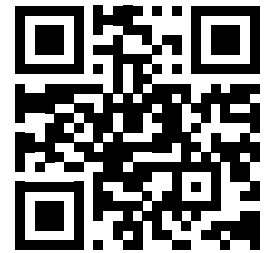
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