

# Liver fibrosis in psoriasis patients

Methotrexate is an antipsoriatic agent used in the management of severe psoriasis. A long-term use of methotrexate is associated with a risk of developing hepatic fibrosis. Liver fibrosis has until recently been monitored by liver biopsies which are expensive and associated with a risk of morbidity and mortality. UniQ PIIINP RIA, a serum marker of N-terminal propeptide of type III procollagen provides a means of monitoring liver fibrosis with a patient-friendly and health-economical way.



### Collagen in the liver

Type III collagen is a major support protein present in all soft tissues, including the liver. In liver fibrosis the concentrations of PIIINP, the aminoterminal propeptide of type III procollagen, are elevated <sup>2</sup>, 3, 4, 5, 6.

#### Simple blood test

The concentration of PIIINP in blood can easily be measured with the Orion Diagnostica UniQ PIIINP RIA assay. Being a serum assay UniQ PIIINP RIA has low biological and analytical variation. Serum sample needs no prepreparation and the antigen in the sample is very stable.

#### Methotrexate treated psoriasis patients

Patients receiving long-term treatment with methotrexate for psoriasis are at risk on developing hepatic fibrosis.<sup>3</sup>

#### Liver biopsies

Until recently, repeated liver biopsy was regarded as the only reliable method of detecting liver fibrosis in these patients. Liver biopsies are expensive and even associated with risks of morbidity and mortality. It has been shown that the need for biopsies in psoriasis patients on long-term methotrexate therapy can be reduced by measuring PIIINP, a serological marker of fibrosis.<sup>3, 4, 5, 6</sup>

## Reliable monitoring with PIIINP instead of liver biopsy

The reliability of PIIINP monitoring has been shown in a study among methotrexate treated psoriasis patients

who were managed by using serial PIIINP measurements and selective liver biopsy and compared with control groups monitored according to standard guidelines. These patients were subjected to sevenfold fewer liver biopsies than the controls without evidence that important liver toxicity was missed in the process <sup>1, 3, 4</sup>.

British Association of Dermatologists: Clinical Guideline on Methotrexate treatment<sup>1</sup>

### A patient-friendly non-invasive method also bringing cost savings

Cost analysis suggests that introduction of these guidelines would produce substantial cost

savings. Moreover, patients would avoid the inconvenience of repeated liver biopsies and the risks biopsy is associated with. The use of PIIINP in monitoring methotrexate treated psoriasis patients is described in a guideline of the British Association of Dermatologists<sup>1</sup>.

#### References

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Blood sample instead of biopsy – a humane way to monitor liver fibrosis



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