

7th International Congress on Autoimmunity LJUBLJANA 5-9 May 2010

PS32.7 [1149]

Anti-TNF α monitoring

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Anti-TNF α therapies such as Infliximab, Adalimumab, and Etanercept represent an important progress in therapy for inflammatory diseases such as rheumatoid arthritis, Crohn's disease, ankylosing spondylitis, etc...However, there remain a proportion of patients who do not recover despite therapy. These drugs are expensive and have the potential of serious toxicity. Therefore, it would be ideal to predict the patients who will respond, so that the use of these drugs can be well targeted.

bmd has developed immunoassays, using ELISA technique, in order to detect TNF α antagonists (ADA, anti-drug antibodies: anti-Infliximab, anti-Adalimumab, anti-Etanercept) before the physical effect are observed.

These quantitative assays have been designed in order to help clinicians to monitor anti-TNF α therapy and predict a failure in the treatment. These fast (<4h) and easy-to-use immunoassays are sensible (ng/mL), specific (interferences not detected) and precise (CV<15%).

As preliminary data, we have found 18 samples that were, ADA « positive » (14 « positive » anti-infliximab and 4 « positive » anti-Adalimumab) out of 115 serum-samples from patients treated with anti- TNF α (Infliximab or Adalimumab). « Positive » samples (ADA+) from Infliximab or Adalimumab treated patients were confirmed « positive » when tested in an inhibition assay. No « positive » anti-Etanercept sample was found.

A prospective study based on more than 300 samples of patients (before and during the anti-TNF α treatment) will highlight the interest of anti-TNF α monitoring as useful information in the evaluation of treatment efficiency. Data will be presented in the poster.

ADA, anti-drug antibodies