antagonist, tocilizumab (TCZ), on NT-proBNP levels and systolic heart function is yet to be obtained.

Objectives: Access the effect of 12 months TCZ therapy on NT-proBNP levels, transthoracic echocardiography results and analyze the association between congestive heart disease progression and RA activity.

Methods: 37 RA patients (pts) (31F/6M); median age 56,5 [48; 63,5] years; disease duration 48 [6; 348] months; DAS28 score 6,15 [5,44; 6,45]; rheumatoid factor (RF)+100%; anti-citrullinated protein antibody (ACPA) + 79,6% were treated in an open-label study with TCZ (8mg/kg every 4 weeks). Identification of NT-pro-BNT in blood serum, transthoracic ultrasound evaluation of left ventriculium ejection fraction (LVEF), E/A ratio performed at baseline and 12 months.

Results: 11 (29,7%) pts had congestive heart disease (CHD) (II functional class of NYHA), 7 (18,9%) pts having signs of mild left ventricular dysfunction (LVD) as dyspnea, shortness of breath, cardiotropic treatment remained the same in the course of the study. After 12 month TCZ treatment as RA activity lowered (DAS28 2.32 [1,75; 3,15], $p < 0,05$), NT-proBNP levels decreased (100,95 [57,9; 117,6] pg/ml to 90,46 [33,62; 106,6] pg/ml), along with elevation of LVEF (60,75 [60; 70]% to 67,68 [62,5; 73,5], $p = 0,001$). Increase of E/A (0,97 [0,8; 1,17] to 1,04 [0,7; 1,42] correlated with decrease of NT-proBNP level ($r = -0,63$, $p = 0,036$). Raise of LVEF over 12 months correlated with decrease of RA activity according to SDAI scale ($r = -0,670$, $p < 0,05$). No significant relationship between NT-proBNP levels, LVEF, E/A and other scales measuring RA activity was found. Clinically all patients had improvement in evaluation of their health and no signs of CHD or RVD progression were found.

Conclusion: Use of TCZ in patients with active RA showed none to positive influence on heart condition, specifically, lowering NT-proBNP levels, improving LVEF and reducing clinical signs of LVD.

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AB0309

MEASURING THE DIFFERENCE: COMPARISON OF MEASUREMENT OF FREE INFLIXIMAB ANTI-DRUG ANTIBODIES

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Background: Infliximab (IFX) was one of the first TNF alpha inhibitors to be licenced in inflammatory arthritis and is still commonly used today. Studies have shown that approximately 50% of primary IFX responders will suffer from secondary loss of response within the first 12 months of treatment (1). The development of Anti-Drug Antibodies (ADAs) plays a significant role in this treatment failure (2).

Monitoring of ADAs helps identify those patients who fail to respond to treatment due to low IFX trough levels. In this scenario the presence of ADAs can aid decision-making regarding increasing IFX dosing or switching biologic therapy to optimise treatment. (3).

Objectives: Despite their potential importance the detection of ADAs varies widely depending on the type of assays used. The aim of this study was to determine the qualitative concordance of three commercially available ELISA kits for measurement of free ADAs to IFX on the Grifols Triturus analyser.

Methods: 150 patient samples from patients with inflammatory conditions and low IFX trough drug levels ($\leq 0,6\mu\text{g/ml}$) were analysed for free ADAs using Promonitor, Lisa Tracker and IDKmonitor kits on the Grifols Triturus automated ELISA analyser.

Results: Kappa coefficient (κ) analysis indicated a moderate agreement between the Promonitor and IDKmonitor assays ($\kappa = 0,484$ (95% CI, 0.357 to 0.611)) and the IDKmonitor and Lisa Tracker assays ($\kappa = 0,485$ (95% CI, 0.348-0.621)) as well as substantial agreement between the Promonitor and Lisa

Tracker assays ($\kappa = 0,768$ (95% CI, 0.667-0.870)). Figure 1 shows the distribution of samples identified as free ADA positive by each kit.

Figure 1. Distribution of samples identified as free ADA positive by Promonitor, Lisa Tracker, and IDKmonitor assays. Fifty samples were considered positive by all assays. Three samples were considered positive by Promonitor and Lisa Tracker, and eight samples were considered positive by Lisa Tracker and IDKmonitor. No samples were considered positive by Promonitor and IDKmonitor. One sample was considered positive by Promonitor only, seven samples were considered positive by Lisa Tracker only, and twenty-six samples were considered positive by IDKmonitor

Conclusion: All kits appear amenable for utilisation in a high-throughput laboratory though a true quantitative comparison between these kits was precluded by the absence of any certified reference material for free ADAs to IFX.

Although broad qualitative agreement was found between the three kits, they should not be used interchangeably for patient management.

Further research is required to estimate the impact of free ADAs on efficiency of IFX treatment and patient management.

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AB0310

TROUGH CONCENTRATION AND ESTIMATED CLEARANCE CAN DETECT IMMUNOGENICITY TO ADALIMUMAB IN RA PATIENTS: A PROSPECTIVE LONGITUDINAL MULTICENTRE STUDY

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