AB0416

A COMPARATIVE STUDY TO ASSESS THE EFFICACY, SAFETY, AND IMMUNOGENICITY OF YLB113 AND ETANERCEPT REFERENCE PRODUCT FOR THE TREATMENT OF PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS

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Background: YLB113 is an investigational biosimilar of the reference product etanercept (ETN), being developed for the treatment of patients with moderate-to-severe rheumatoid arthritis (RA) and other approved indications of the reference product ETN.

Objectives: The phase 3 study of YLB113 was conducted in Europe, Japan, and India across more than 100 rheumatology clinics to compare efficacy, safety, and immunogenicity of YLB113 with ETN in patients with RA.

Methods: A total of 528 patients with moderate-to-severe RA receiving concomitant treatment with methotrexate were randomized to receive a once-weekly dose of 50 mg of subcutaneously administered YLB113 or ETN. The primary end point was the ACR20 response rate at Week 24, with equivalence confirmed if the 95% confidence interval (CI) was within the range of -15% to 15%. Other efficacy end points, such as DAS28 with safety and immunogenicity end points, were assessed periodically up to Week 52.

Results: The ACR20 response rate at Week 24 was 81.2% for YLB113 and 86.8% for ETN in the full analysis set, with a treatment difference of -5.6% (95% CI: -11.6, 0.5), which was completely within the predefined equivalence margin of -15% to 15%. The result for sensitivity analysis using the per protocol set population revealed that the proportion of subjects who showed ACR20 response at Week 24 was similar between both treatment groups, at -4.6% (95% CI: -10.1, 0.8). The incidence of treatment-emergent adverse events was comparable between YLB113 and ETN (55.5% vs 65.7%), and the incidence of antidrug antibody development up to Week 24 was in favor of YLB113 (0.8% vs 8.3%).

Conclusion: The present comparative study demonstrated the biosimilarity of YLB113 to ETN on the triad of efficacy, safety, and immunogenicity in patients with moderate-to-severe RA, and thus can be extrapolated to other therapeutic indications approved for ETN. The therapeutic equivalence of YLB113 and ETN in terms of the primary efficacy end point at Week 24 and long-term safety comparability until Week 52 was established with lower immunogenicity.

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AB0416B

EFFICACY OF INFLIXIMAB IN RA PATIENTS BASED ON TOTAL COUNT OF INFUSIONS

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Objectives: To analyze the correlation between cumulative dose of infused infliximab and its' therapeutic and antidestructive effect in patients with rheumatoid arthritis (RA).

Methods: 135 patients with confirmed RA were included into a 1-year study. All patients were assigned to a recommended dosing regimen of 3 mg/kg infliximab as an intravenous induction at 0, 2 and 6 weeks followed by a maintenance 3 mg/kg dose every 8 weeks thereafter. Clinical (TJC and SJC), laboratory (CRP and ESR) parameters and quality of life assessments (HAQ) were performed during each visit.

The score trends of DAS28 disease activity scale were used as the primary criterion for evaluation of infliximab therapeutic effect. Sharp Vander Heijde (SvH) modification scoring method was used for dynamic assessment of erosion and for joint space narrowing. All patients were assessed and examined according to the Protocol before each infusion of infliximab. Therapeutic results were evaluated in all ITT population at Week 54 from the initiation of treatment (including those who did not complete the envisaged course of infliximab).

The patients were divided into three groups:

1. those who received ≤ 4 infusions of infliximab (N=63);
2. those who received 5-7 infusions of infliximab (N=31);
3. those who received ≥ 8 infusions of infliximab (N=41).

Patients from Group 1 received at average 2.5 infusion of infliximab, from Group 2 - 5.8 infusion, and from Group 3 - 8.8 infusion.

Results: High disease activity based on DAS 28 (>5.1) score was documented in the majority of participants at baseline: in 69% - in Group 1, in 86.6% - in Group 2, and in 62.1% - in Group 3. Moderate RA activity (3.2 < DAS 28 $\leq$ 5.1) was found in 31% in Group 1, in 13.4% - in Group 2, and in 37.9% - in Group 3.

All patients demonstrated rapid (already by Week 14 on-treatment) and significant (p<0.05) decrease of RA activity. This reduction remained significant by the end of the study at Week 54 as compared to baseline scores. Meanwhile, by the end of the study the mean DAS 28 score in Group 1 was significantly higher compared to Groups 2 and 3. No significant differences were found between Groups 2 and 3 during the FUP.

Similar patterns in RA activity differentiation were identified within individual groups: the highest proportion of pts with high laboratory activity at Week 54 was found in Group 1, receiving ≤ 4 infliximab infusions. The Group 3 showed the highest proportion of patients with low laboratory RA activity at Week 54 (including patients in remission according to DAS 28 criteria) (53.9% compared to 27.3% and 50% in Groups 1 and 2, respectively). Percentages of remissions in Groups 3 and 2 were comparable (28.6% and 23.1%, respectively), while in Group 1 the remission rates were lower (18.2%).

We analyzed the dynamics of total Sharpe score during 54 weeks FUP in all three groups, and found that patients receiving ≤ 4 infliximab infusions demonstrated more significant radiological progression as compared to patients from two other groups.

Conclusion: Low cumulative dose of infliximab can induce a long-lasting clinical effect, but does not significantly inhibit further destruction of joints. There were no significant differences between Groups 2 and 3 in the degree of radiological progression.

Disclosure of Interests: None declared

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AB0416C

THE RESULTS OF THE USE OF TOFACITINIB (TOFA) IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IN MOSCOW. ANALYSIS DATA FROM MOSCOW UNIFIED ARTHRITIS REGISTRY(MUAR)

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Background: Moscow Unified Arthritis Registry (MUAR) started at 01 DEC 2012. By 01 DEC 2017, 829 RA patients were included in the register.

Objectives: The aim of the study was to evaluate the effectiveness and treatment survival of TOFA and identify predictors of the effectiveness of TOFA.