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DOI: 10.1136/annrheumdis-2014-eular.2258

THU0156 IMPACT OF GOLIMUMAB ON PHYSICAL FUNCTION AND EMPLOYABILITY OF PATIENTS WITH RHEUMATOID ARTHRITIS: 5-YEAR DATA FROM 3 PHASE III CLINICAL TRIALS

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Objectives: To assess the impact of golimumab (GLM) on physical function and employability in patients with rheumatoid arthritis (RA) with various prior treatment histories, after 5 years of therapy.
Methods: The efficacy and safety of GLM were assessed in methotrexate (MTX)-naïve RA patients (GO-BEFORE, N=637), patients with inadequate response to MTX (GO-FORWARD, N=444), and patients previously treated with TNF-inhibitors (TNFi, GO-AFTER, N=445). Patients with active RA were randomized to placebo (PBO), GLM 100mg+PBO (GO-BEFORE and GO-FORWARD), or GLM (50 or 100mg), q4w. Patients in GO-BEFORE and GO-FORWARD could receive concomitant MTX or no MTX and crossed-over to GLM after wk24 (GO-FORWARD) OR wk52 (GO-BEFORE), while patients in GO-AFTER were on background (with or without) MTX and crossed-over to GLM after wk24. Clinical remission was defined as DAS28 (ESR) <2.6. Physical function was measured using Health Assessment Questionnaire (HAQ) and employability was defined as being employed or being able to work if job was available (Yes/No). 5 year data were presented by 3 patient populations.
Results: At baseline, the percent of patients with disability (HAQ-DI score >0.5) in each of 3 RA populations were 90.9% in patients who were MTX-naïve, 87.6% in patients who were MTX-inadequate responders and 92.3% in patients who were TNFi-experienced. Among the analyzed patient population for employability (not retired and age <65 years), the percent of patients unemployable due to their RA at baseline were 9% in MTX-naïve patients, 8.1% in MTX-inadequate responders and 13.1% in TNF-experienced patients. After treatment with GLM, among those who had disability at baseline, 46.8% of MTX-naive patients, 37.5% of MTX-inadequate responders and 27.5% of TNFi-experienced patients had no disability (HAQ-DI score ≤ 0.5) at wk256; among patients unemployable at baseline, 29.5% of MTX-naive patients, 28.6% of MTX-inadequate responders and 5.4% of TNFi-experienced patients regained employability at wk256. Similar trends of better outcomes on disability and employability of MTX-naïve patients were observed among those who achieved remission at wk256: 65.1% in MTX- naive patients, 54.4% in MTX-inadequate responders and 53.1% in TNFi-experienced patients achieved no disability; and 73.3% in MTX-naive patients, 50% in MTX-inadequate responders and 50.0% in TNFi-experienced patients regained employability.
Conclusions: This analysis indicates that effective treatment at an early stage may result in reduction in disability and improvement in employability over the long-term.
Disclosure of Interest: C. Han Employee of: Janssen Research & Development, LLC., E. Keystone Grant/research support: Janssen Research & Development, LLC., R. Fleischmann Grant/research support: Janssen Research & Development, LLC., J. Smolen Grant/research support: Janssen Research & Development, LLC., E. Matteson: None declared, P. Emery Grant/research support: Janssen Research & Development, LLC., M. Genovese Grant/research support: Janssen Research & Development, LLC., T. Gathany Employee of: Johnson & Johnson Pharmaceutical Services, LLC, E. Hsia Employee of: Janssen Research & Development, LLC.
DOI: 10.1136/annrheumdis-2014-eular.2535

THU0157 COMPARISON OF CLINICAL OUTCOMES BETWEEN RHEUMATOID ARTHRITIS PATIENTS UNDER TNF INHIBITORS USING A TAPERING STRATEGY OR STANDARD THERAPY REGIMEN IN DAILY CLINICAL PRACTICE

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Background: There is sparse evidence about the disease control after longterm tapering of TNF inhibitors (TNFi)in rheumatoid arthritis (RA)patients (pts)
Objectives: To compare the clinical outcomes in RA pts on tapering strategy with RA patients on standard regimen of TNFi with a longterm followup
Methods: In this observational study 144 RA pts under TNFi therapy [infliximab (Ifx), adalimumab (Ada) or etanercept (Etn)] were included. Two groups were compared: Group1 (67 pts from Spain) on tapering strategy and Group2 (77 pts from Netherlands) on standard therapy. Pts were matched on duration of inactive disease before inclusion and duration of the follow-up. Disease activity had to be low (DAS28 <3.2) for at least 6 months before inclusion. The tapering strategy included dose reduction and/or interval elongation, however if a flare occurred treatment could be intensified. The clinical activity was measured by DAS28 at different time points: *visit-0* (at baseline, just before starting the biological), *visit-1* (Group1: just before starting tapering; Group2: after at least 6 months in low disease activity) and *visit-2* (the last visit available after visit-1)
Results: Sixty seven RA pts were in tapering group (Group 1: 23 with Ifx, 23 with Ada and 21 with Etn) and 77pts in control group (Group 2: 22 with Ifx, 27 with Ada and 28 with Etn). Most pts were rheumatoid factor positive [52/67 (77.6%) in Group 1 vs 58/75 (77.3%) in Group 2, p=0.968]. No significant differences were seen in disease duration (years) (16.49±7.17 in Group1 vs 17.49±7.79 in Group 2, p=0.489), time (years) in inactive disease before visit-1 (1.14±0.95 in Group 1 vs 0.92±0.54 in Group 2, p=0.421) and following (years) between visit-1and visit-2. (2.38±1.17in Group 1 vs 2.41±0.86 in Group 2, p=0.327). No statistical differences were found in clinical activity (DAS28) and percentage of patients with flares (see Table). Although the dropout was similar in both groups, the secondary inefficacy was more frequent in the tapering group (see Table).The overall drug administered was reduced in tapering group at visit-2 in comparison with the group on standard therapy regimen (an elongation in administration interval of 32.8% in Ifx, 52.9% in Ada and 52.6% in Etn)

RA patients (total=144)	Group 1: Tapering group n=67	Group 2: Control group n=77	p values
DAS28 (m ± SD)			
Visit 0	4.86±0.97	4.77±0.91	0.560
Visit 1	2.27±0.63	2.11±0.67	0.116
Visit 2	2.72±0.94	2.46±0.98	0.123
Percentage of patients with flares, n/N (%)	28/67 (41.8%)	36/75(48%)	0.458
Reasons to dropout (number of patients)			
Remission	4/67(5.9%)	4/77 (5.2%)	
Secondary inefficacy	6/67(8.9%)	2/77 (2.6%)	
Dropout for others reasons	4/67 (5.9%)	7/77 (9.1%)	
Interval administration in weeks at visit-2, m ± SD			
Ifx:	11.91±2.73	8.00±0.00	<0.001
Ada:	4.25±1.61	2.00±0.00	<0.001
Etn:	2.11±0.89	1.00±0.00	<0.001

Conclusions: The tapering strategy in a cohort of RA patients with inactive disease results in an important reduction in the drug administered while the clinical course is similar to a RA cohort without tapering. However, a small percentage of RA patients on tapering seems to be more prone to dropout due to secondary inefficacy
Disclosure of Interest: C. Plasencia Grant/research support: Pfizer, G. Wolbink Grant/research support: Pfizer, Speakers bureau: Pfizer, Amgen, C. Krieckaert Speakers bureau: Abbvie, Pfizer, E. Kneepkens: None declared, S. Turk: None declared, M. Bonilla: None declared, A. Villalba: None declared, M. Nurmohamed Grant/research support: Abbvie, BMS, MSD, Pfizer, UCB, Roche, Consultant for: BMS, Pfizer, Roche, Speakers bureau: Abbvie, Pfizer, Roche, C. Diego: None declared, E. Martín-Mola Speakers bureau: Abbvie, UCB, Pfizer, Roche, D. Pascual-Salcedo Grant/research support: Pfizer, Speakers bureau: Pfizer, A. Balsa Grant/research support: Pfizer, Speakers bureau: Pfizer, Abbvie, Roche
DOI: 10.1136/annrheumdis-2014-eular.2133

THU0158 INHIBITION OF RADIOGRAPHIC PROGRESSION AND ITS ASSOCIATION WITH CLINICAL PARAMETERS IN RA PATIENTS TREATED WITH CT-P13 AND INNOVATOR INFLIXIMAB IN PLANETRA STUDY

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Background: CT-P13 is a biosimilar of innovator infliximab (INX), approved by the European Medicines Agency in 2013. Clinical data up to 1 year from PLANETRA have been reported at EULAR 2013[1]
Objectives: To compare the radiographic progression between CT-P13 and INX treatment and to assess its association with anti-drug antibody (ADA) and clinical disease activity in active rheumatoid arthritis (RA) patients, who participated in the PLANETRA study.
Methods: Radiographs obtained at baseline and week 54 were evaluated with the "paired review" method and the evaluation was performed by two independent readers without knowing the time point of the radiographs. The individual component scores of the joint damage progression (JDP) were calculated according to the van der Heijde modification of the Sharp scoring system. The analysis was performed to demonstrate comparability in JDP between two

treatment groups using Student's t-test and elucidate an association of JDP with ADA and clinical parameters such as ACR20, IgM rheumatoid factor (RF), and anti-CCP.

Results: Among the 606 patients, 336 patients had radiographs both at baseline and week 54. The mean change from baseline JDP was similar between CT-P13 and INX treatment groups with respect to total Sharp score (TSS), joint space narrowing (JSN) score and erosion score at week 54 (CT-P13, 1.0/0.4/0.7; INX, 0.6/0.7/0.0, respectively). At week 54, a higher progression of TSS could be observed in the ADA positive patients (CT-P13, 1.1; INX, 1.2) compared with the ADA negative patients (CT-P13, 0.9; INX, 0.0), but the scores were comparable between two groups. The ACR20 responders tended to show a similar progression of TSS between two treatment groups (CT-P13, 0.6; INX, 0.5) at week 54. The mean change of TSS in ACR20 non-responders from baseline to week 54 were also comparable between the two treatment groups (CT-P13, 2.0; INX, 0.9). ACR20 responders showed less progression of TSS compared with non-responders in both treatment groups but these results were statistically not significant with respect to response status and treatment groups. At week 54, the progression of TSS was similar between treatment groups for each of the negative and positive baseline IgM RF subgroups (CT-P13, -0.5/1.4; INX, -0.2/0.7, respectively). The patients who belong to the negative and positive baseline anti-CCP subgroups showed also a comparable radiographic progression between treatment groups (CT-P13, 0.5/1.0; INX, 0.2/0.7, respectively). In both CT-P13 and INX, there was less progression of TSS in the patients who had negative baseline IgM RF or anti-CCP but the changes were statistically not significant.

Conclusions: Patients treated with CT-P13 showed a comparable radiographic progression as compared to those treated with INX at week 54. The ADA and clinical parameters such as ACR20, IgM RF, and anti-CCP showed tendency of association with radiographic progression.

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[1] Yoo DH, et al. Ann Rheum Dis 2013;72(S3):73

Disclosure of Interest: D. Yoo Grant/research support: CELLTRION, Inc., Consultant for: CELLTRION, Inc., Speakers bureau: CELLTRION, Inc., W. Park Grant/research support: CELLTRION, Inc., Consultant for: CELLTRION, Inc., Speakers bureau: CELLTRION, Inc., P. Miranda Grant/research support: CELLTRION, Inc., M. Piotrowski Grant/research support: CELLTRION, Inc., E. Ramiterre Grant/research support: CELLTRION, Inc., S. Shevchuk Grant/research support: CELLTRION, Inc., A. Baranauskaite Grant/research support: CELLTRION, Inc., S. Lee Employee of: CELLTRION, Inc., U. Müller-Ladner Speakers bureau: CELLTRION, Inc.

DOI: 10.1136/annrheumdis-2014-eular.3056

THU0159 DISEASE ACTIVITY ASSESSMENT USING THE DAS28, CDAI AND SDAI AND EFFECT OF ANTI-DRUG ANTIBODY ON CLINICAL RESPONSE IN A RANDOMIZED, DOUBLE-BLIND, COMPARATIVE TRIAL OF CT-P13 AND INNOVATOR INFLIXIMAB: PLANETRA STUDY

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Background: CT-P13 is a biosimilar to innovator infliximab (INX) approved by the European Medicines Agency. From the PLANETRA, which is randomized, double-blind, active-controlled trial to assess efficacy and safety of CT-P13 in rheumatoid arthritis (RA) patients, therapeutic equivalence was demonstrated via the primary endpoint (ACR20 at Week30)[1]. Several secondary endpoints exist that can capture valuable information to the clinician.

Objectives: To compare efficacy via the DAS28, CDAI, and SDAI of CT-P13 and INX in patients with RA and effect of anti-drug antibody (ADA) on the clinical outcome measures.

Methods: In PLANETRA, 606 patients with RA were treated with either 3 mg/kg of CT-P13 or INX with methotrexate at usual schedule up to Week 54. Key secondary endpoints were CDAI, SDAI, and DAS28. ADA was measured at baseline and at Week 14, 30 and 54 by an electrochemiluminescent assay.

Results: The mean baseline DAS28 scores reflected high disease activity (DAS28-ESR, 6.7 vs 6.6; DAS28-CRP, 5.9 vs 5.8; CT-P13 vs INX). The mean change in DAS28-ESR over 54 weeks was -2.4 in both treatment groups. The baseline CDAI and SDAI scores were similar between treatment groups (mean CDAI, 40.7 vs 39.6; SDAI, 42.4 vs 41.4; CT-P13 vs INX, respectively). At week 54, CDAI decreased by -25.7 and -24.0 and SDAI decreased by -26.3 and -24.6 in the CT-P13 and INX groups, respectively. Statistically significant difference between groups was not shown in these assessments. The proportion of patients who become ADA positive was comparable between CT-P13 (52.3%) and INX (49.5%). More improvement on DAS28-ESR was shown in ADA negative subgroup than in ADA positive subgroup at Week 54, similarly in both treatment groups (CT-P13, -2.8 vs -2.1; INX, -2.7 vs -2.0). SDAI score decreased more in ADA negative subgroup than ADA positive subgroup up to Week 54 (CT-P13, -28.5 vs -24.3; INX, -26.7 vs -22.3). Similar trends were found in DAS28-CRP and CDAI at Week 54 ($p<0.05$). No statistical differences were shown between CT-P13 and INX within the both ADA subgroups in these efficacy outcomes at Week 54. DAS28 (ESR or CRP) results were not different between two treatment groups over time in each ADA subgroup ($p>0.05$), but different between ADA subgroups over time within each treatment group ($p<0.05$).

Conclusions: These results demonstrate the efficacy of CT-P13 which is comparable to that of INX, based on various clinical outcome measures. The ADA development could diminish the clinical response achieved by infliximab, and the magnitude of influence was similar in both CT-P13 and INX treatment groups throughout the study.

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[1] Yoo D.H., et al. Ann Rheum Dis 2013;72:1613-20.

Disclosure of Interest: D.-H. Yoo Grant/research support: CELLTRION, Inc., Consultant for: CELLTRION, Inc., Speakers bureau: CELLTRION, Inc., W. Park Grant/research support: CELLTRION, Inc., Consultant for: CELLTRION, Inc., Speakers bureau: CELLTRION, Inc., M. Brzosko Grant/research support: CELLTRION, Inc., P. Géher: None declared, D. Andersone Grant/research support: CELLTRION, Inc., J. Jaworski Grant/research support: CELLTRION, Inc., D. Rekalov Grant/research support: CELLTRION, Inc., B. Oparanov Grant/research support: CELLTRION, Inc., R. Kausiene Grant/research support: CELLTRION, Inc., C. Pacheco-Tena Grant/research support: CELLTRION, Inc., S. Lee Employee of: CELLTRION, Inc.

DOI: 10.1136/annrheumdis-2014-eular.3707

THU0160 ONE YEAR RESULTS OF "TREAT TO TARGET" STRATEGY IN PATIENTS WITH EARLY AND LONG-STANDING RHEUMATOID ARTHRITIS IN CLINICAL PRACTICE: THE REMARCA TRIAL

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Background: According to Treat to Target (T2T) recommendations the primary goal of treatment of patients (pts) with rheumatoid arthritis (RA) is clinical remission. This implies a revision of treatment every 3-6 months with the use of combination therapy if necessary. Assessment of the results of applying the T2T strategy into practice is an important task.

Objectives: To study the results of treatment according the T2T strategy in pts with RA in clinical practice.

Methods: The REMARCA (Russian investigation of MethotrexAte and biologics in eaRly aCtive inflammatory Arthritis) investigator-initiated trial includes pts with asevere ctive RA. All pts started treatment with SC MTX monotherapy using fast increase from 10 to 25-30 mg/week. To exclude the influence of steroids, we allowed only 2 intra-articular injections per every 3 months (pts could continue steroids per os in low doses if prescribed before the enrollment in the study). Therapy was revised every 3 months using DAS28, SDAI and CDAI indices. The goal of treatment was clinical remission or low disease activity (LDA) as quickly as possible.

Results: By January 2014, 210 pts with RA were included, and 88 pts have passed the 12 months control point (22 males, 66 females, 92% IgM RF positive, 87,5% anti-CCP positive, including 46 pts with early RA (duration$\leq$6 months) and 42 pts with long-standing RA (duration 22 [11;53] months). At 6 months we achieved LDA or remission according to DAS28 in 43 (49%), SDAI in 53 (60%), CDAI in 55 (63%) of pts. At 12 months LDA or remission were observed by DAS28 in 54 (61%) of pts, SDAI – 65 (74%), CDAI in 67 (76%) of pts. Combination with biologics (in most cases TNF inhibitors) was used in 57 (65%) of pts at (median) 3 [3;6] month. There were 13 cases of switching between biologics. Remission was observed more often during the first 6 months among patients who did not require biological therapy, but at 12 month combination therapy group showed similar results (table 1). "Functional remission" (HAQ$\leq$0,5) was observed significantly more frequently in patients with good initial response to SC MTX. Patients with early RA significantly less likely required treatment with biologics (52%) than patients with long-standing RA (79%, p=0,014).

Table 1. Remission rates at 6 and 12 months of treatment

Patients characteristic	MTX monotherapy, n=31*	MTX + biologics, n=57*	p (chi-square)
DAS28 remission at 6 months, n=21	12 (39%)	9 (16%)	0,001
DAS28 remission at 12 months, n=41	15 (48%)	26 (46%)	0,26
SDAI remission at 6 months, n=17	10 (32%)	7 (12%)	<0,001
SDAI remission at 12 months, n=34	15 (48%)	19 (33%)	0,31
CDAI remission at 6 months, n=17	11 (35%)	6 (11%)	<0,001
CDAI remission at 12 months, n=32	14 (45%)	18 (32%)	0,27
HAQ $\leq$0,5 at 6 months, n=39	20 (65%)	19 (33%)	0,015
HAQ $\leq$0,5 at 12 months, n=46	21 (68%)	25 (44%)	0,017

*Percentage in column.

Conclusions: SC MTX monotherapy allowed to achieve LDA or remission in the vast majority of patients with good response to treatment. In patients who did not responded well to MTX (65%), combination with biological agents caused results,