investigations [1, 3, 4]. In pts with the typical risk characteristics at BL, i. e. male sex, higher age, diabetes mellitus, and CHD, higher rates of CV events were observed. In addition, increased rates were also found in anti-CCP negative pts and in pts with asthma or renal insufficiency

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SAT0164

COMPARISON OF THE RETENTION RATE OF EACH BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUG GROUP ACCORDING TO THE STATUS AND CONCENTRATION OF ANTI-CYCLIC CITRULLINATED PEPTIDE ANTIBODY AND RHEUMATOID FACTOR: DOUBLE CENTERCLINICAL STUDY

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Background: Although biological disease-modifying antirheumatic drugs (bDMARDs) have markedly improved the clinical course for patients with rheumatoid arthritis (RA), there are no reliable predictors of treatment response in individual patients. The drug retention rate in observational studies can be considered as a composite measure and index of drug effectiveness¹.

Objectives: The aim of this study was to investigate potential predictors for bDMARDs by clarifying and comparing the retention ratio of bDMARDs according to the status and concentration of anti-cyclic citrullinated peptide antibody (anti-CCP), rheumatoid factor (RF), and anti-nuclear antibody (ANA).

Methods: We included consecutive RA patients from Mitsui Memorial Hospital and Kawakita General Hospital (both in Tokyo) who received bDMARD treatment between April 2018 and August 2018. We obtained data on the administered bDMARDs and the reason for discontinuation for each patient, and collected patient information, including the status of RF and ANA, at the initiation of each bDMARD, as well as the baseline status and concentration of anti-CCP. We categorized infliximab, etanercept, adalimumab, golimumab, and certolizumab pegol as TNF inhibitors (TNFi), and compared the TNFi group with the tocilizumab (TCZ) group and abatacept (ABT) group in terms of patient characteristics and retention rate. Statistical analysis of the group comparison was performed using one way ANOVA and Kruskal-Wallis tests, and categorical data were assessed by Fisher's exact test. The retention ratio was compared using the Kaplan-Meier generalized Wilcoxon test.

Results: This study included 214 patients (male 34, female 180, mean age 66.8) and 305 bDMARD cases were analyzed. The TNFi group

included 160 cases, and the TCZ group and ABT group comprised 66 and 79 cases, respectively. Overall, the ABT group had the highest retention rate compared with the TNFi and TCZ groups, and the persistency rate of the ABT group at 60 months was 66.1%. Reasons for discontinuation of bDMARDs were insufficient efficacy (63.0%) and adverse events (29.4%). There was no significant difference regarding to the retention rate between anti-CCP negative and -positive patients or between RF-negative and -positive patients in each bDMARD group. After stratifying all patients according to anti-CCP status and concentration, among the three bDMARD groups, the ABT group (n=70) had the highest retention rate ($p<0.05$) in the anti-CCP-positive category, whereas the TCZ group (n=12) had the highest retention rate ($p=0.27$) in the anti-CCP-negative category. Regarding the concentration of anti-CCP, in the ≥ 100 U/ml category, the ABT group (n=42) had the highest retention rate ($p<0.05$), but such differences were not found in the $4.4 - <100$ U/ml category. The persistency rates of the ABT group in the ≥ 100 U/ml category at 60 months was 73.4%. Moreover, the ABT group (n=59) had the highest retention rate ($p<0.05$) in the RF-positive category, whereas the TCZ group (n=20) had the highest retention rate in the RF-negative category ($p=0.15$). The persistency rate of the ABT group in the RF-positive category at 60 months was 68.3%. There were no significant differences in the retention rate among the three bDMARD groups in the ANA-negative or -positive categories.

Conclusion: The status and concentration of anti-CCP, and the status of RF were found to be useful predictors for bDMARD efficacy in patients with RA.

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SAT0165

PERSPECTIVES OF WOMEN WITH CHRONIC RHEUMATIC DISEASES ON THEIR JOURNEY TO MOTHERHOOD: COMPARISON OF SURVEYS FROM ASIA-PACIFIC AND EUROPE

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Background: The onset and diagnosis of chronic rheumatic disease (CRD) in women often overlap with their peak reproductive years. A previous survey¹ reported fears and misconceptions amongst women with CRD in Germany, France, UK, Italy and Spain (EU5) on their journey to motherhood.

Objectives: To explore the perspectives of women with CRD in Asia-Pacific (APAC) regarding disease management and pregnancy, and the support they receive compared with patients in Europe.

Methods: Women of childbearing age (18–45 years) with self-reported moderate to severe CRD (rheumatoid arthritis [RA], psoriatic arthritis [PsA], axial spondyloarthritis [axSpA]/ankylosing spondylitis [AS]) from Australia (AUS), Japan (JPN) and Hong Kong/Taiwan (HK/TW) completed a 20-min online survey (Sep–Nov 2018), similar to the previous EU5 survey.¹ Participants had been pregnant in the past 2–5 years.

Results: 210 APAC participants had CRD (RA: n=122, PsA: n=48, axSpA/AS: n=40); 306 EU5 participants had CRD. Most APAC patients had moderate CRD (77%; severe: 23%). In their most recent pregnancy, 40% of the women were actively trying to get pregnant, 40% were neutral and 20% were either not thinking about a pregnancy or were actively trying to avoid it. Prior to pregnancy, more women consulted rheumatologists (62%) vs primary care physicians (26%) or OB/GYNs (20%); multiple responses were possible). Pregnancy planning was first discussed with a healthcare professional (HCP) at diagnosis (33%), at treatment initiation

(32%) or during a regular visit (30%). Similar to EU5, discussions on family planning with HCPs in APAC were most often initiated by patients (Figure A). APAC and EU5 patients delayed pregnancy for similar reasons including: fear of passing on health issues to their child, not feeling physically healthy enough to carry a child to term, not being emotionally ready to become a parent (Figure B). Antepartum, 55% of women reported disease improvement, 27% stable disease and 18% worsening disease activity. Compared with EU5, APAC women were less likely to have a treatment plan aligned between HCPs (APAC: 50%; EU5: 65%). The most frequently reported reasons for cessation of medications in pregnancy were 'worried about the treatment harming the foetus' (HK/TW: 68%; JPN: 59%; EU5: 54%) and 'switched to a safer treatment' (AUS: 52%). Similar to EU5, most women in APAC discussed breastfeeding with an HCP (>85%). However, whether women felt they had to decide between treatment and breastfeeding postpartum varied (HK/TW: 79%; EU5: 69%; JPN: 66%; AUS: 43%). Compared with EU5, fewer women in APAC felt they had all the information they needed on the impact of rheumatic disease and treatment on pregnancy and health (APAC: 34%; EU5: 56%).

Conclusion: Fears and misconceptions about family planning, pregnancy and breastfeeding are common amongst women with CRD in APAC and Europe. In APAC, there may be a greater need for patient access to consistent and accurate information. Pregnancy planning with input from both physicians and obstetricians could alleviate patient concerns and minimise delays to pregnancy or treatment interruption.

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Figure A: Patients consulting a healthcare professional before pregnancy were most likely to take the initiative in raising the subject of pregnancy

B: Women of childbearing age with CRD had concerns that delayed their decision to become a mother

[a] Multiple answers were possible. APAC: Asia-Pacific (Australia, Japan, Hong Kong and Taiwan); CRD: chronic rheumatic disease; EU5: Europe (Germany, France, UK, Italy and Spain); HCP: healthcare professional.

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SAT0166

GOLIMUMAB AS FIRST, SECOND OR AT LEAST THIRD BIOLOGIC AGENT IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA), PSORIATIC ARTHRITIS (PSA) OR ANKYLOSING SPONDYLITIS (AS) – POST HOC ANALYSIS OF A NON-INTERVENTIONAL STUDY IN GERMANY

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Background: Golimumab (GLM) has demonstrated efficacy in RA, PsA, and AS in several randomized clinical trials with biologic-naïve patients. Data from real world practice comparing biologic naïve and experienced patients are lacking.

Objectives: The aim of this post hoc analysis is to assess effectiveness of GLM used as first, second, or at least third biologic agent in RA, PsA and AS in a real-life setting.

Methods: Post hoc analysis of the non-interventional, prospective, 24-month GO-NICE study with RA, PsA and AS patients (pts.) starting GLM 50mg SC once monthly in a real practice setting in Germany, details were shown earlier (1,2). Endpoint measures DAS28-ESR, PsARC, and BASDAI are shown as observed.

Results: In 1458 pts. with RA, PsA or AS GLM was administered as first (n=305, 286, 292, resp.), second (n=104, 136, 130 resp.), or at least third biologic agent (n=64, 79, 58 resp.). Biologic agents in previous treatments included Adalimumab (348), Etanercept (287), Infliximab (139), Tocilizumab (27), Rituximab (15), Certolizumab (14), or Abatacept (n=12). 43.0, 30.8, 39.1% of pts. with RA, 53.1, 38.2, 34.2% with PsA, and 53.8, 49.2, 41.4% with AS completed the study until month 24.

RA pts: (n=473) RF was positive in 76.9%, 70.2%, and 59.4%, ACPA + in 76.2%, 78.4%, 59.0%, and disease duration was 9.7, 10.1, 14.3 years, in pts. with GLM use as 1st, 2nd, at least 3rd line respectively.

DAS28 score at BL was 5.0, 4.9, 5.1 in first, second, and at least third line use of GLM, respectively and dropped significantly in all groups (table). After 3 months of treatment 27.5%, 19.5%, 14.5% of pts. were in remission (<2.6), after 24 months 45.3%, 50.0% or 33.3%, respectively.

PsA pts: (n=501) Disease duration was 12.4, 13.7, 13.8 yrs, in pts. with GLM use as 1st, 2nd, at least 3rd line respectively. PsARC response was achieved in 76.4%, 51.0% and 50.0% in first, second, and at least third line use of GLM, respectively at 24 months.

AS pts: (n=483) HLAB27-positive in 81.2%, 80.8%, and 74.1%, in pts. with GLM use as 1st, 2nd, at least 3rd line respectively. At BL 162 pts. had extra articular manifestations, most commonly iritis, enthesitis, IBD, and dactylitis (in 31.2%, 35.9%, and 43%, pts. respectively. Pts. with at least 2 previous bDMARDs had higher BASDAI at BL than pts. with GLM use in 1st or 2nd line: 5.7 vs. 5.0, and 4.9. After 24 months of treatment the mean BASDAI scores decreased significantly (p<0.001 vs. BL) to 2.1, 2.9, 2.9 in 1st, 2nd, and at least 3rd line use of GLM, respectively.

Overall safety findings were comparable to those reported in controlled trials and no new safety signals were detected.

RA DAS28-ESR	1 st line (bDMARD-naïve)	2 nd line	3 rd line (at least)
Month (mo) 0, BL mean DAS28 [SD]	n=303 5.0 ± 1.3	n=104 4.9 ± 1.3	n=64 5.1 ± 1.5
mo 24: mean DAS28 [SD] p vs. BL	n=128 2.9 ± 1.3 <.0001	n=32 2.9 ± 1.3 <.0001	n=24 3.4 ± 1.5 <.0001
PsA PsARC	1 st line (bDMARD-naïve)	2 nd line	3 rd line (at least)
visit 1 mo 0, BL	n=286	n=136	n=79
mo 24:	n=113	n=25	n=12
PsARC, response n (%)	76.4%	51.0%	50.0%
AS BASDAI	1 st line (bDMARD-naïve)	2 nd line	3 rd line (at least)
mo 0, BL mean BASDAI [SD]	n=290 5.0 ± 2.0	n=130 4.9 ± 2.0	n=58 5.7 ± 2.0
mo 24: mean BASDAI [SD] p vs. BL	n=157 2.1 ± 1.8 <.0001	n=64 2.9 ± 2.4 <.0001	n=24 2.9 ± 2.0 <.0001

Conclusion: In this non-interventional study of pts. with RA, PsA and AS, golimumab therapy was effective, with better outcomes achieved in biologic-naïve pts. Significant improvement of DAS and BASDAI was also achieved with GLM use in second line. Third line use of GLM results in less benefit.