REFERENCES:

Disclosure of Interests: Al Li Yeo: None declared, Jason Ong: None declared, Kathryn Connelly: None declared, Suong Le: None declared, Ronnie Ptasznik: None declared, Jane Ross: None declared, Eric F. Morand Grant/research support from: Pfizer LTD, UC, Consultant for: AbbVie, Eli Lilly, EMD Serono, Pfizer Ltd., Sanofi, Paul Emery Grant/research support from: Pfizer, MSD, AbbVie, Bristol-Myers Squibb, Roche, Consultant for: Pfizer, MSD, AbbVie, Bristol-Myers Squibb, UCB, Roche, Novartis, Gilead,Samsung, Sandoz and Lilly, Siiva Savic Grant/research support from: Novartis and Sobi DOI: 10.1136/annrheumdis-2019-eular.7573

OP0021 PREDICTING SEVERE INFECTION IN REPEAT CYCLES OF RITUXIMAB AND EFFECTS OF HYPOGAMMAGLOBULINAEMIA FOR THE TREATMENT OF RHEUMATIC AND MUSCULOSKELETAL DISEASES

Md Yuzuaful Md Yusof1,2, Edward Vital1,2, Damien M Mcelvenny3, Elizabeth Henson1,2, Sudipto Das1,2, Shouvik Dass1, Andy C Rawstron4, Maya Buch1,2, Paul Emery1,2, Sinisa Savic1,2, 1University of Leeds, Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom; 2Leeds Teaching Hospitals NHS Trust, NIHR Leeds Biomedical Research Centre, Leeds, United Kingdom; 3Leeds University; 4Manchester Teaching Hospitals; 5University of Manchester Population Health, Manchester, United Kingdom; 6Leeds Teaching Hospitals NHS Trust, Haematological Malignancy Diagnostic Service, Leeds, United Kingdom

Background: Rituximab (RTX) is effective in treating various rheumatic and musculoskeletal diseases (RMDs). Repeat cycles are often required for disease control but may lead to hypogammaglobulinaemia. Low IgG at baseline has been associated with increased risk of severe infection event (SIE) post-RTX. However, there are limited data on predictors of SIEs in repeat cycles including immunoglobulin levels and B-cell numbers as well as outcomes of hypogammaglobulinaemia.

Objectives: To assess predictors of SIEs in repeat RTX cycles and effects of hypogammaglobulinaemia in terms of SIEs rates, humoral response and its persistence post-cessation of RTX.

Methods: A retrospective study was conducted in the first 700 consecutive ARD patients treated with at least a cycle of RTX in Leeds. IgM, IgA and IgG levels were measured at baseline and 4–6 months after each cycle. For cycles 2–4 (C2-4), predictors for SIEs were analysed using mixed-effects logistic regression analysis.

Results: 550 patients were female, mean(SD) age 56(16) years and median (IQR) disease duration 7.9(3.4-15.0) years. 507(72%) had RA, 94(13%) SLE, 49(7%) gout, 4(1%) ACPA+. ACPA-positive patients had lower IgG as this is a consistent predictor of SIE and may affect infection outcome. For cycles C2-C4, predictors for SIEs were measured at baseline and 4-6 months after each cycle. For cycles 2-4 (C2-4), predictors for SIEs were analysed using mixed-effects logistic regression analysis.

Conclusion: In our study, RTX cycles 2-4 were associated with increased odds of SIEs, but not B-cell numbers or depletion of MRI-erosions. However, IgG was predictive for RTX cycle to identify patients at risk of SIEs. Vigilance is needed for those with lower IgG as this is a consistent predictor of SIE and may affect infection outcomes when patients are switched to a different bDMARD. For those at risk of SIEs, reduction of corticosteroid dose could reduce risk. Low B-cell numbers were not predictive of SIEs.

Acknowledgement: This research was supported by Octapharma and NIHR (DRF-2014-07-155). The views expressed are those of the author(s) & not necessarily of the NHS, NIHR or DOH.

Disclosure of Interests: Md Yuzuaful Md Yusof: None declared, Edward Vital Grant/research support from: He has received honoraria and research grant support from Roche, GSK and AstraZeneca.; Damien M Mcelvenny: None declared, Elizabeth Henson: None declared, Sudipto Das: None declared, Shouvik Dass Grant/research support from: Roche and GSK, Andy C Rawstron: None declared, Mayu Bucha Grant/research support from: Roche, Eli Lilly, EMD Serono, Pfizer LTD, UC, Consultant for: AbbVie; Eli Lilly, EMD Serono, Pfizer Ltd., Sanofi, Paul Emery Grant/research support from: Pfizer, MSD, AbbVie, Bristol-Myers Squibb, Roche, Consultant for: Pfizer, MSD, AbbVie, Bristol-Myers Squibb, UCB, Roche, Novartis, Gilead,Samsung, Sandoz and Lilly, Siiva Savic Grant/research support from: Novartis and Sobi DOI: 10.1136/annrheumdis-2019-eular.4517

OP0022 DO MRI-DETECTED EROSIONS IN PATIENTS WITH CLINICALLY SUSPECT ARTHRALGIA PREDICT PROGRESSION TO RHEUMATOID ARTHRITIS? A LONGITUDINAL STUDY

Fenne Wouters1, Xanthe Matthijssen1, Debbie Boeters1, Robin Ten Brinck1, Annette van der Helm - van Mil2, Ellis Niemantsverdriet3, 1Leiden University Medical Centre, Rheumatology, Leiden, Netherlands; 2Erasmus University Medical Centre, Rotterdam, Netherlands

Background: Radiographic joint erosions are a hallmark of Rheumatoid Arthritis (RA). MRI is more sensitive than radiographs in detecting erosions. It is unknown if MRI-detected erosions are predictive for RA-development in patients with Clinically Suspect Arthralgia (CSA).

Objectives: We investigated the prognostic value of MRI-detected erosions (any MRI-erosion, or MRI-erosion characteristics that were recently identified as specific for RA) in CSA.

Methods: Patients presenting with CSA (n=491) underwent contrast-enhanced 1.5T MRI of the wrist, metacarpophalangeal (MCP) and metatarsophalangeal (MTP) joints at baseline. MRIrs were scored according to RAMRIS. Presence of any MRI-erosion (erosion score ≥1) and RA-specific erosion characteristics as identified previously (grade 2 or 3 erosions, erosions in MTPs, erosions in MCPs if aged <40) were studied with clinically apparent inflammatory arthritis development as outcome (median follow-up of 17 months). Analyses were corrected for age, CRP, ACPA and MRI-detected inflammation.

Results: Erosions were present in 20.6% of patients. Presence of erosions was associated with arthritis development (HR multivariable analysis 0.85 (95% CI 0.52-1.4)). Also the different erosion characteristics were not predictive in CSA patients (grade ≥2 HR 1.29 (95% CI 0.40-4.14), erosions in MTPS HR 0.89 (95% CI 0.38-2.09) and MTP1 if aged <40 HR 0.98 (95% CI 0.23-4.21)). MRI-erosions were more prevalent in ACPA-positive than in ACPA-negative patients (32.3% versus 18.8%, p=0.02). However, no association with arthritis development was observed in both subgroups.

Conclusion: MRI-detected erosions in hands and feet of patients with CSA were not predictive for arthritis development. These data warn against overinterpretation of MRI-detected erosions in CSA.

Disclosure of Interests: Fenne Wouters: None declared, Xanthe Matthijssen: None declared, Debbie Boeters: None declared, Robin Ten Brinck: None declared, Annette van der Helm - van Mil:2, Ellis Niemantsverdriet:3


LB0001 EFFICACY AND SAFETY OF FILGOTINIB FOR PATIENTS WITH RHEUMATOID ARTHRITIS WITH INADEQUATE RESPONSE TO METHOTREXATE: FINCH1 PRIMARY OUTCOME RESULTS

Bernard Combe1, Alan Kivitz2, Yoshia Tanaka3, Désirée van de Heijde4, Franziska Matzkies5, Beatrix Bartok3, Lei Ye5, Ying Guo5, Chantal Tasset6, John Sundy6, Neelufar Mozaffarian7, Robert B.M. Landewe8, Sang-Cheol Bae9, Edward C. Keystone10, Peter Nash11,12, 1CHU Montpellier, Montpellier University Montpellier, France; 2Erasmus University Medical Centre, Rotterdam, Netherlands; 3University of Manchester Population Health, Manchester, United Kingdom; 4Leeds Teaching Hospitals NHS Trust, Haematological Malignancy Diagnostic Service, Leeds, United Kingdom; 5University of Leeds, Leeds Institute of Rheumatic and Musculoskeletal Medicine, Leeds, United Kingdom; 6Leeds University; 7Leeds University; 8University of Manchester Population Health, Manchester, United Kingdom; 9CHU Montpellier, Montpellier University Montpellier, France; 10Altona University Center for Clinical Research, Duncansville, United States of America; 11University of Occupational and Environmental Health, Kitakyushu, Japan; 12Leiden University Medical Centre, Leiden, Netherlands; 13Gilead Sciences, Inc., Foster City, United States of America; 14Galapagos NV, Mechelen, Belgium; 15Amsterdam University Medical Center, Amsterdam, Netherlands; 16Hanyang University Hospital for Rheumatic Diseases, Seoul, Korea, Rep. of (South Korea); 17Mount Sinai Hospital, Toronto, Canada; 18University of Toronto, Toronto, Canada; 19University of Queensland, St. Lucia, Australia

Background: Filgotinib (FIL) is an orally administered, potent and selective inhibitor of Janus kinase 1 (JAK1) that has shown good efficacy and was well tolerated for treatment of rheumatoid arthritis (RA).

Objectives: To evaluate efficacy and safety of FIL treatment in patients with RA who have had an inadequate response to methotrexate (MTX).
