Bergman: None declared, L. Guthrie: None declared, M. Alba: None declared, T. Pincus Shareholder of: Health Report Services, Inc
DOI: 10.1136/annrheumdis-2017-eular.3500

AB0233 REMISSION ACCORDING TO RAPID3 (ROUTINE ASSESSMENT OF PATIENT INDEX DATA 3) IN PATIENTS WITH RHEUMATOID ARTHRITIS: A CROSS-SECTIONAL STUDY FROM ROUTINE CARE AT 3 USA SITES

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Background: RAPID3 remission criteria provide similar results to DAS28 criteria, although less stringent compared to ACR/EULAR Boolean criteria. RAPID3 remission criteria are more feasible in routine care[1] and have been reported at 25% in patients from France[1] and 21% from Norway[2].
Objectives: We examined the proportion of patients in remission and 3 other severity categories according to RAPID3 at 3 sites at which MDHAQ is completed by all patients in routine care.
Methods: All patients seen at each rheumatology site complete an MDHAQ/RAPID3 at all visits in the waiting area as part of their routine care. The MDHAQ includes 0–10 scores for physical function, pain and patient global estimate, compiled into a 0–30 RAPID3, as well as scores for fatigue, RADAI self-report of painful joints, and demographic data. Physicians complete a global assessment (DOCGL) on a 0–10 visual analog scale (VAS). A random visit with complete questionnaire data for each RA patient from each site was included in the analyses. The proportion of patients in 4 RAPID3 categories, high severity (>12/30), moderate severity (6.1–12), low severity (3.1–6), and remission (≤3), was computed. MDHAQ demographic and clinical measures and DOCGL were compared in the 4 RAPID3 severity groups using chi-square and ANOVA tests.
Results: 420 RA patients from the 3 sites were analyzed. Remission rates according to RAPID3 severity ranged from 23% to 26%, similar to reported rates from France and Norway. Low severity ranged from 7–24%, moderate severity from 23–29% and high severity from 21–46%. Age and sex were similar in the disease severity categories at the 3 sites (Table). Patients in the moderate and high severity groups at each site had higher scores for fatigue, RADAI self-reported joint pain, and DOCGL.

Table 1. Mean (SD) for demographic and clinical characteristic of patients in remission versus other disease severity categories according to RAPID3 in each site. *p<0.001

	Remission (≤3)	Low (3.1–6)	Moderate (6.1–12)	High (>12)
Site 1 (N=137)	32 (23.4%)	11 (8%)	31 (22.6%)	63 (46%)
Female, n (%)	27 (84.4%)	9 (81.8%)	26 (83.9%)	59 (93.6%)
Age, yrs	58.5 (16.9)	57.9 (18.8)	56.8 (17.5)	55.6 (14.5)
Fatigue (0–10)	1.1 (1.5)	2.3 (2.0)	3.1 (2.1)	6.6 (2.3)*
Self-report RADAI (0–48)	1.9 (2.9)	5.0 (3.9)	7.5 (5.60	17.0 (9.2)*
DOCGL (0–10)	1.6 (1.2)	3.7 (1.7)	3.2 (1.4)	5.3 (1.9)*
Site 2 (N=144)	37 (25.7%)	35 (24.3%)	42 (29.2%)	30 (20.8%)
Female, n (%)	28 (75.7%)	22 (62.9%)	34 (80.9%)	24 (80%)
Age, yrs	56.6 (16.9)	62.0 (14.6)	62.3 (14.7)	62.5 (15.9)
Fatigue (0–10)	0.9 (1.0)	2.7 (1.9)	4.1 (2.4)	5.6 (3.0)*
Self-report RADAI (0–48)	NA	NA	NA	NA
DOCGL (0–10)	0.9 (1.3)	1.0 (1.0)	1.7 (1.5)	3.4 (2.7)*
Site 3 (N=139)	32 (23%)	10 (7%)	33 (23.7%)	64 (46%)
Female, n (%)	23 (72%)	9 (90%)	20 (62%)	50 (79%)
Age, yrs	44.4 (13.8)	43.8 (17.0)	50.3 (17.8)	50.9 (15.0)
Fatigue (0–10)	0.4 (0.8)	2.6 (2.7)	4.1 (2.7)	6.9 (2.9)*
Self-report RADAI (0–48)	1.3 (1.9)	4.7 (4.2)	5.7 (5.1)	18.3 (12.2)*
DOCGL (0–10)	1.1 (1.1)	3.2 (1.9)	2.5 (1.2)	3.2 (1.5)*

Conclusions: Similar RAPID3 remission rates were seen at 3 USA sites (about 24%), comparable to results from France and Norway.
References:
[1] Castrejon I, Dougados M, et al. J Rheumatol 2013, 40(4):386–393.
[2] Uhlig T, Lie E, et al. J Rheumatol 2016, 43(4):716–723.
Disclosure of Interest: I. Castrejon: None declared, M. Bergman: None declared, K. Gibson: None declared, Y. Yazici: None declared, J. Block: None declared, T. Pincus Shareholder of: Health Report Services, Inc
DOI: 10.1136/annrheumdis-2017-eular.2749

AB0234 ORAL CONTRACEPTIVES, MENOPAUSE AND RHEUMATOID ARTHRITIS IN KOREAN WOMEN: A NATIONWIDE STUDY

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Background: Rheumatoid arthritis (RA) is a chronic autoimmune inflammatory disease with a multifactorial etiology. Hormonal factors, ethnicity and their interaction may result in the development of RA.
Objectives: We investigated the effects of oral contraceptives (OCs) and menopause on RA in South Korea women using nationwide data.
Methods: Data were collected from the 2008–2012 Korea National Health and Nutrition Examination Surveys. A total of 17,890 eligible participants were included. As there were significant differences in baseline characteristics between the patients on OCs and those not taking OCs, we used propensity score-matching to adjust for such differences. We calculated the odds ratios (ORs) and 95% confidence intervals (95% CIs) of OCs leading to RA development.
Results: The peak incidence of RA was between 50–59 years old. The overall rate of OC usage was 16.5% and mean duration of OC using was 18.41±28.78 (ranged from 0 to 360) months. Before propensity score-matching, using multivariable logistic regression adjusted for traditional risk factors, taking OC was a significantly associated with RA development (OR 1.18, 95% CI 1.18–1.19, p <0.001). After propensity score-matching, taking OCs was not associated with RA (OR 1.05, 95% CI 0.83–1.34, p <0.001). Menopausal status showed strongly significant increase in the risk of RA.
Conclusions: There was an association between menopausal status and RA development in South Korean women. However, usage of OCs did not show significant effects on the development of RA.
References:
[1] Pikwer M, Bergstrom U, Nilsson JA, Jacobsson L, Berglund G, Turesson C. Breast feeding, but not use of oral contraceptives, is associated with a reduced risk of rheumatoid arthritis. Ann Rheum Dis 2009;68:526–30.
[2] Hazes JM, van Zeben D. Oral contraception and its possible protection against rheumatoid arthritis. Ann Rheum Dis 1991;50:72–4.
[3] Pullerits R, d'Elia HF, Tarkowski A, Carlsten H. The decrease of soluble RAGE levels in rheumatoid arthritis patients following hormone replacement therapy is associated with increased bone mineral density and diminished bone/cartilage turnover: a randomized controlled trial. Rheumatology (Oxford) 2009;48:785–90.
[4] Doran MF, Crowson CS, O'Fallon WM, Gabriel SE. The effect of oral contraceptives and estrogen replacement therapy on the risk of rheumatoid arthritis: a population based study. J Rheumatol 2004;31:207–13.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.4769

AB0235 EFFECT OF BASELINE DISEASE ACTIVITY ON ACHIEVING SUSTAINED LOW DISEASE ACTIVITY IN BARICITINIB PHASE 3 STUDIES

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Background: In the Phase 3 studies RA-BUILD[1] and RA-BEAM[2], baricitinib (bari) has demonstrated clinical efficacy including reduced disease activity in RA patients (pts) with an inadequate response (IR) to conventional synthetic DMARDs (csDMARDs).
Objectives: To determine whether disease activity at baseline (BL) affects the achievement of sustained low disease activity (LDA) with bari treatment.
Methods: In this post hoc analysis, pts from the placebo (PBO) and bari 4 mg treatment arms of the RA-BUILD and RA-BEAM studies were categorised based on their level of disease activity at BL; either CDAI ≤median or CDAI >median, where median was 34.8 for RA-BUILD and 36.2 for RA-BEAM. Pts who achieved CDAI ≤10 at ≥2 consecutive visits (sustained LDA) within 12 and 24 weeks (wks) were considered as responders. The length of time required by pts to achieve sustained LDA was determined for each group using the incidence rate (percent pts responding per month). In addition, the association between response and dose of bari was explored in csDMARD-IR pts randomised to bari (2 mg or 4 mg) once daily from the RA-BUILD study.
Results: Within the bari 4 mg arm, a greater proportion of pts with CDAI ≤median at BL achieved sustained LDA and within a shorter treatment duration as indicated by higher incidence rates, compared to pts with CDAI >median at BL. In pts with CDAI ≤34.8 at BL, the 2 mg and 4 mg doses showed similar efficacy, but a larger proportion of pts with CDAI >34.8 reached sustained LDA at 24 wks with bari 4 mg than 2 mg (41.4% and 32.4%, respectively).

Table 1. Proportions and Rates of Sustained LDA Achievement with Baricitinib Treatment

Pts achieving CDAI ≤10		BL CDAI ≤ median			BL CDAI > median		
		PBO	Bari 4 mg	Bari 2 mg	PBO	Bari 4 mg	Bari 2 mg
RA-BUILD	N	116	108	114	108	116	111
Wk12	%	19.8	42.6	40.4	7.4	21.6	18.0
	i-rate	4.36	11.78	10.50	1.55	4.69	3.90
Wk24	%	44.8	63.9	63.2	17.6	41.4	32.4
	i-rate	10.63	19.20	17.59	3.80	9.59	7.27
RA-BEAM	N	249	236		235	246	
Wk12	%	23.7	39.8		4.3	18.7	
	i-rate	2.71	5.40		0.42	1.98	
Wk24	%	34.5	69.1		14.0	41.9	
	i-rate	4.35	12.97		1.49	5.47	

Pts were defined as responders if they met the response criterion within the stated time frame, prior to any rescue or discontinuation. % = percent of pts meeting response criteria; CDAI median = 34.8 (RA-BUILD) or 36.2 (RA-BEAM); i-rate = exposure-adjusted incidence rate (% pts/month); N = number of randomised and treated pts.