## American College of Rheumatology (ACR) Annual Scientific Meeting; 14–19 November 2014; Boston, Massachusetts, United States

1 Deadline for submission of abstracts: 24 June 2013 (Noon Eastern Time) 2 < Title character count: 126> [limit: assume 250 characters] 3 <Character count: 2709 (includes 250 for table)> [limit: 2750 characters] (excludes spaces. 4 title, names of authors and affiliations and disclosures; table or figure counts towards character count by ~250 characters) 5 6 7 Benefits of Early Onset of DAS28 (CRP) <2.6 on Physical Functioning, Quality of Life and Resource Use Among RA Patients in a Clinical Practice Setting 8 9 10 E Alemao, Bristol-Myers Squibb, Princeton, United States S Joo, Bristol-Myers Squibb, Hopewell, United States 11 12 H Kawabata, Bristol-Myers Squibb, Princeton, United States 13 S Banerjee, Bristol-Myers Squibb, Princeton, United States 14 M Frits, Brigham and Women's Hospital, Boston, United States C Iannaccone, Brigham and Women's Hospital, Boston, United States 15 N Shadick, Brigham and Women's Hospital, Boston, United States 16 M Weinblatt, Brigham and Women's Hospital, Boston, United States 17 18 Background/Purpose: Guidelines in RA recommend that treatment should be aimed at 19 20 reaching a target of remission or low disease activity (LDA) as soon as possible, and that 21 treatment should be adjusted frequently (every 3-6 months) in patients (pts) not at target. However, there are limited data from clinical practice on the benefits of attaining rapid 22 remission/LDA. The objective of the current analysis was to compare the clinical and 23 resource use benefits of attaining LDA (DAS28 [CRP] <2.6) within 1 yr in pts with RA in a 24 clinical practice setting. 25 26 **Methods:** Pts enrolled in the Brigham and Women's Hospital Rheumatoid Arthritis Sequential Study (BRASS) Registry, established in 2003, were analyzed. The BRASS 27 Registry mostly comprises pts with established RA who were evaluated semi-annually on 28 multiple clinical patient-reported outcomes and resource utilization parameters. The current 29 30 analysis is based on the first 5 yrs of pt follow-up in BRASS and includes pts who were not at DAS28 (CRP) <2.6 at baseline. Pts attaining DAS28 (CRP) <2.6 at 1-yr follow-up were 31 considered as 'DAS <2.6 Soon' and those attaining DAS (CRP) <2.6 later than 1 yr were 32 considered as 'DAS <2.6 Late'. Clinical (physical functioning measured by MHAQ), quality of 33 34 life (QoL; measured by EQ-5D, SF-12 physical component summary [PCS], Patient Health

Questionnaire-9 [PHQ-9]); and resource utilization (hospitalization, ER visits, durable

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- medical equipment [DME] use) outcomes up to 5 yrs were compared in univariate analysis
- between pts attaining 'DAS <2.6 Soon' vs 'DAS28 <2.6 Late'. To control for differences in
- baseline covariates, generalized linear models were used for continuous outcomes of HAQ,
- 39 SF-12, EQ-5D and PHQ-9; logit models were used for categorical outcomes of resource use.
- 40 Covariates in the multivariate analysis included baseline demographics, duration of RA
- disease, smoking status, baseline disease status, and treatment.
- Results: 417 pts with RA were included in the current analysis: 151 (36.2%) were 'DAS <2.6
- 43 Soon' and 266 (63.8%) were 'DAS <2.6 Late'. At baseline, pts in the two groups were
- similar, respectively, in sex (83 vs 84% females), mean age (SD) (54.2 [12.7] vs 58.3 [13.0]
- yrs) and never smoked status (53.0 vs 48.9%). Fewer pts in the 'DAS <2.6 Soon' group were
- on biologic DMARDs than in the 'DAS <2.6 Late' group (31.1 vs 38.7%, respectively). Pts in
- 47 the 'DAS <2.6 Soon' group had significantly better MHAQ and QoL, as well as fewer
- 48 hospitalizations, DME use and ER visits in univariate analysis than the 'DAS28 <2.6 Late'
- 49 group. Similar findings for all outcomes, except hospitalization/ER visits, were observed in
- 50 multivariate analysis (see table).

Table: Difference in Outcomes at 1 year and 2 years in Patients Attaining DAS28 <2.6 Soon vs Late				
Outcomes	1-year post evaluation		2-year post evaluation	
	Mean difference between DAS <2.6 Soon vs Late	p-value	Mean difference between DAS <2.6 Soon vs Late	p-value
HAQ	-0.127	0.003	-0.097	0.0213
SF-12 PCS	Not available	_	3.84	0.0034
PHQ-9	Not available	_	-1.16	0.0035
EQ-5D	0.057	0.0001	0.036	0.0234
	Odds ratio for DAS <2.6 Soon vs Late	95 % CI	Odds ratio for DAS <2.6 Soon vs Late	95 % CI
Hospitalization	0.57	0.29–1.12	0.58	0.24-1.42
DME use	0.55	0.32-0.92	0.49	0.26-0.92
ER	1.17	0.34-4.03	1.52	0.40-5.68

- 51 Conclusion: Pts achieving LDA within 1 year benefit more (i.e. more improvement in HAQ
- and QoL outcomes and lower DME use during follow-up) vs those attaining LDA later.
- 53 Programs geared towards earlier achievement of guideline targets can improve overall
- 54 clinical and economic outcomes in RA.

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### **APPENDIX**

Key words: Cardiovascular disease, risk management, rheumatoid arthritis

Submission category: Health Services Research, Quality Measures and Quality of Care

Preferred presentation format: No preference

### **Additional Information**

Research Method:	Observational
Type of Trial:	Epidemiologic or Observational
Type of Trial Phase:	Other ->

**Track: Clinical practice** 

Primary research method: Observational

Study sponsor statement: Bristol-Myers Squibb. The study sponsor provided funding for

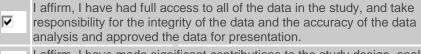
the completion of the study and the development of the abstract.

#### **AUTHOR AGREEMENTS**

#### For information for all authors:

#### **Presenting Author Agreement**

The ACR does not condone presentations given by an invited presenter who has not been intimately involved in the development of the data and who cannot meet the criteria for authorship. **Presenting authors will be required to check both statements to be eligible to present.** 



I affirm, I have made significant contributions to the study design, analysis or interpretation of results.

#### Institutional Review Board Affirmation

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- I understand that abstracts submitted for the ARHP may not be dually submitted to the ACR and vice versa.
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- I understand that, if accepted for presentation, the presenting author or co-authors listed on the abstract must present the abstract during an oral and/or poster presentation.

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