

**[FRI0562] ATTRITION AND PARTICIPANT CHARACTERISTICS IN A RHEUMATOID ARTHRITIS COHORT**

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**Background:** The generalizability and validity of longitudinal observational studies is contingent on participant characteristics. If attrition is not random, it is important to identify any systematic differences between patients who continue to participate versus those who drop out.

**Objectives:** The purpose of this analysis was to compare characteristics of rheumatoid arthritis (RA) patients who continue to participate in the Ontario Best Practices Research Initiative (OBRI) to those of patients who have dropped out prior to reaching their 3 yr follow up.

**Methods:** Currently, 61 rheumatologists in Ontario (51% of active rheumatologists in Ontario) recruit patients into the OBRI. As of January 2015, 1533 patients had consented and were eligible to participate. 175 (11.4%) patients dropped out before reaching their 3 yr follow up assessment.

Among the drop outs, 109 (7.1%) withdrew consent, 38 (2.5%) were lost to follow up, and 28 (1.8%) refused to re-consent after 2 yrs of follow up. In addition to the drop outs, 38 (2.5%) patients had died. 1320 (86.1%) patients remained active participants. Patient characteristics and disease activity at enrollment were compared in the 175 patients who dropped out versus the 1320 patients who continued to participate. A survival curve was generated to look at time of drop out over the 3 year follow up period.

**Results:** Compared to patients who dropped out, patients who continued to participate had higher household incomes, lower disease activity scores, and were more likely to be taking a biologic at the time of enrollment (Table 1). The survival curve shows that the majority of patients drop out within the first two years (Figure 1).

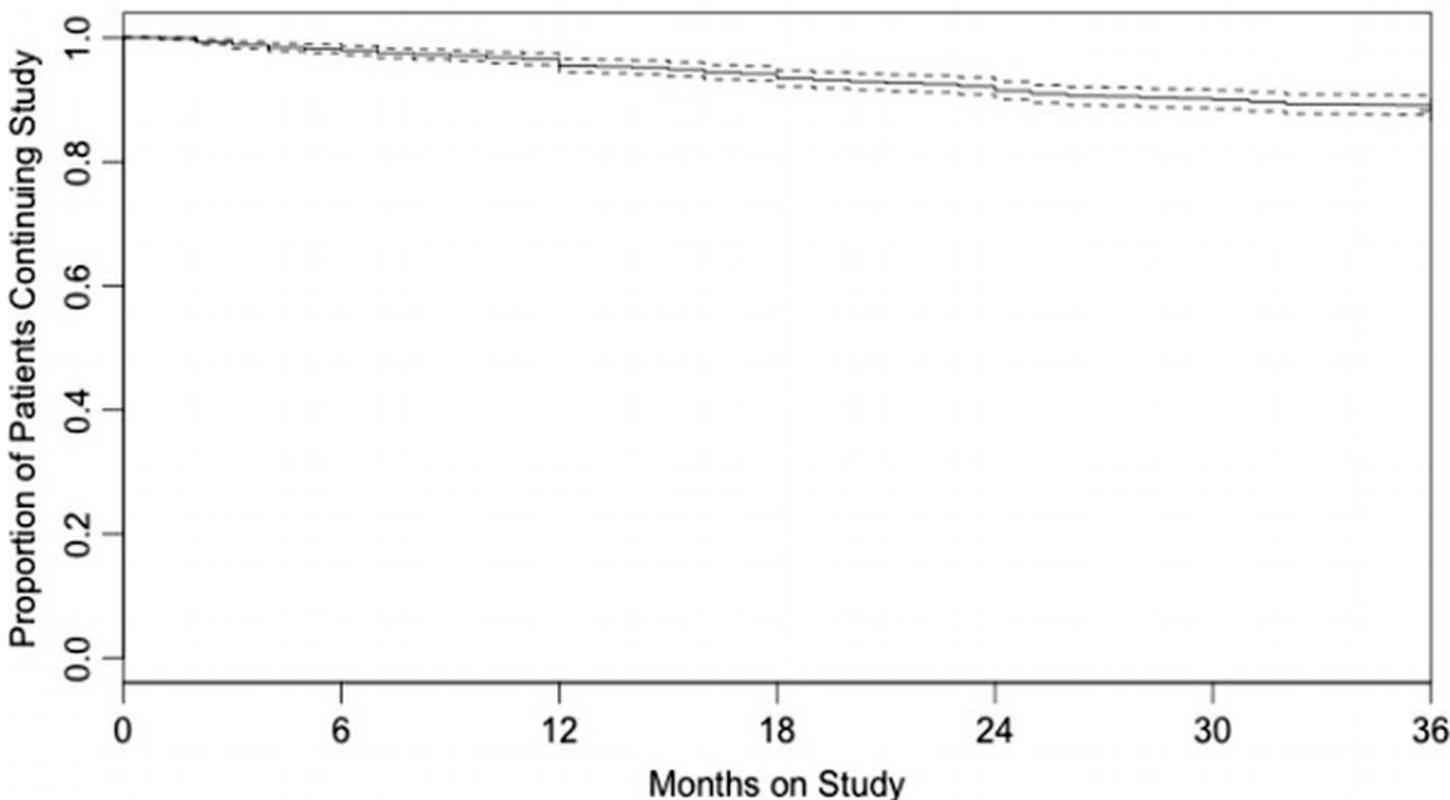
**Table 1. Patient Characteristics and Disease Activity at Time of Enrollment into OBRI**

	Patients who dropped out Active patients	
	(N=175)	(N=1320)
Age, mean (SD)	57.1 (15.4)	56.9 (12.6)
Female, N (%)	125 (75%)	1041 (79%)
White, N (%)	140 (88%)	1133 (91%)
Education, N (%)		
> High school	146 (87%)	1191 (92%)
*Household income, N (%)		
≥50,000	48 (28%)	515 (39%)
Employment (full time), N (%)	75 (45%)	615 (52%)
Having private insurance, N (%)	101 (60%)	848 (68%)
Duration of disease (yrs), mean (SD)	7.8 (9.9)	9.2 (9.8)
*DAS28 (0-9.4), mean (SD)	4.9 (4.4)	4.4 (1.6)
*HAQ (0-3), mean (SD)	1.44 (0.78)	1.22 (0.76)
*Pain Score (0-3), mean (SD)	1.76 (0.89)	1.48 (0.87)
*RADAI (0-10), mean (SD)	4.8 (2.2)	4.0 (2.2)
Number of co-morbidities, mean (SD)	2.3 (1.9)	2.5 (2.1)
*RA medications		
Biologic therapy, N (%)	13 (8%)	200 (15%)

\*p<0.05.

Figure 1

### Kaplan-Meier Survival Curve of Patients from Enrollment to 3-Year Follow-up



**Conclusions:** Patients with higher disease activity at enrollment were more likely to drop out. The OBRI attrition rate was 11.4% during the first three years of follow up, with 4.7% of patients dropping out in the first year, 3.5% in the second year and 3.2% in the third year. OBRI attrition rates were lower than those reported in the BRASS cohort (4.31% per 6 month follow up cycle) 1 and the ARAMIS cohort (6% per year) 2. The lower number of drop outs in the OBRI cohort could be attributed to the time invested in rheumatologist site visits by our study monitors and the biannual followup by our OBRI telephone interviewers.

**References:**

Iannaccone et al., Arthritis Care & Research, July 2013

Reisine et al., American College of Rheumatology, February 2000

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**Disclosure of Interest:** None declared

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