OBJECTIVES: Biologic treatments for rheumatoid arthritis (RA) vary widely in both the time required to administer treatment and treatment frequency. The primary aim of this study is to quantify the tradeoffs RA patients are willing to make between treatment time and frequency. Patients with a self-reported physician diagnosis of moderate-to-severe RA completed a Web-enabled conjoint-analysis survey. Severity of self-reported symptoms was determined by the Routine Assessment of Patient Index Data 3 (RAPID3) score. Patients were presented with a choice experiment that asked hypothetical treatments to trade six attributes: response rate, mode of administration, treatment time, treatment frequency, and the risks of immediate, mild and serious treatment reactions. Preference weights were estimated using mixed-logit and were used to calculate the relative importance of treatment attributes and the marginal rate of substitution between treatment time and frequency (MRS). RESULTS: A total of 901 patients completed the survey. The risk of serious treatment reaction was the most important attribute followed by the frequency of treatments and treatment response rate, which were equally important. The risk of a mild treatment reaction was the least important attribute. The MRS implies that if the duration of a 4-hour infusion administered 4 times per year were reduced to 2 hours: 1) the frequency would have to be 10.4 times per year to keep utility constant; 2) the frequency of a 4-hour infusion administered 4 times per year would have to be reduced to 1.6 times per year to generate an equivalent change in utility; and 3) there would be a 50% increase in predicted probability of choosing the treatment if all other attributes of this and other RA treatments were unchanged. CONCLUSIONS: Convenience of RA treatment is important to RA patients. Treatment duration and frequency likely play an important role in patients’ choice of RA treatment.

PM549 PATIENTS’ WILLINGNESS-TO-PAY FOR BIOLOGIC TREATMENTS IN JUVENILE IDIOPATHIC ARTHRITIS
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OBJECTIVES: The availability of biologic therapies has increased the complexity of treatment decisions in juvenile idiopathic arthritis (JIA). There are important differences in the effectiveness, safety, convenience and cost of these treatments compared to other than the more restricted public benefit funding also limit access to biologics in JIA. The objective of this research was to determine parents’ willingness-to-pay (WTP) for attributes related to drug treatments in JIA and for profiles reflecting methotrexate (MTX) and etanercept (ETN).

METHODS: WTP was determined using parameter estimates from a discrete choice experiment (DCE). WTP was estimated as the ratio of an attribute divided by the negative of the cost attribute. Average WTP for MTX and ETN profiles were estimated using expected compensating variation. Bootstrapping was used to generate 95% confidence intervals for all WTP estimates.

RESULTS: Parents had the highest WTP for improved participation in daily activities and pain relief followed by the elimination of treatment side-effects. Parents were willing to pay $2,080 (95% CI $1,689, $4,065) more for ETN than MTX. When MTX was associated with no side-effects, parents were willing to pay $985 (95% CI $482, $2,882) more for ETN or no more (95% CI $-596, $488) respectively.

CONCLUSIONS: Parents’ WTP represents a monetary equivalence of utility for drug treatments in JIA and their desire for treatments that reduced pain, improved daily functioning and eliminated side-effects. These findings align with recent guidelines which recommend more aggressive therapies for children with JIA. Unfortunately, high costs and limited access to biologic drugs in Canada prevent children from receiving the most effective treatment. Findings from this study will be used to inform policy decisions surrounding the future of prescription drug programs for JIA and other chronic pediatric conditions.

PM548 INTRAVENOUSLY ADMINISTERED GOLIMUMAB SIGNIFICANTLY IMPROVES HEALTH RELATED QUALITY OF LIFE AND WORK PRODUCTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS: RESULTS OF A PHASE III, PLACEBO-CONTROLLED TRIAL
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OBJECTIVES: To evaluate the association of fatigue with physical function and disease activity in RA patients and the impact of treatment with IV golimumab (GOL) on fatigue.

METHODS: GO-FURTHER was a Phase III, multicenter, randomized, placebo-controlled study. Adult patients with active RA despite MTX therapy were randomized to placebo or IV GOL 2 mg/kg (GOL group) at wk0, and q4wks thereafter. Patients in placebo group with ≥10% improvement in TJC/SJC from baseline at wk16 entered early escape and received 2 mg/kg GOL infusion at wk16 and 20. Impact on physical function was assessed using the disability index of the HAQ. Fatigue was measured using FACIT-F questionnaire, and clinically meaningful improvement in FACIT-F was defined as ≥4 point increase in scores. Correlation of FACIT-F with HAQ and disease activity and remission (DAS28 using CRP=2.6) was analyzed using Pearson correlation, or multiple linear and logistic regression models to adjust for other confounding variables (age, CRP, TJC, SJC). Comparisons were performed using ANOVA on variances.

RESULTS: Parents had the highest WTP for improved participation in daily activities and pain relief followed by the elimination of treatment side-effects. Parents were willing to pay $2,080 (95% CI $1,689, $4,065) more for ETN than MTX. When MTX was associated with no side-effects, parents were willing to pay $985 (95% CI $482, $2,882) more for ETN or no more (95% CI $-596, $488) respectively.

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