

of all infliximab (after 18 months of marketing) and 16% of etanercept (after 5 months since marketing).

In contrast to the bio-naïve group and those with a history of a previous (but not the same biologic), there was no readily available comparator group for the non-medical switcher group. To this end, we assessed three tentative definitions for a comparator; i) a historical comparison, i.e., same patients 18 months before the switch, ii) an individually matched sample of those patients still on originator treatment at the time of the switch, and iii) the total cohort of those who had not switched.

Conclusions: "Uptake" of biosimilars can be expressed both as proportion of all new starts and as proportion of ongoing treatments. Assessments of uptake, and any comparison between biosimilars and their originators, need to be based on line of therapy in order to avoid mixing up effects of channeling with true differences between originator and similar. For the same reason, any originator comparator for non-medical switchers needs to be reflective of those patients who stood the same chances of switching, but did not switch.

Disclosure of Interest: D. Di Giuseppe: None declared, T. Frisell: None declared, S. Ernestam: None declared, H. Forsblad-d'Elia: None declared, E. Lindqvist: None declared, U. Lindström: None declared, C. Sjöwall: None declared, J. Asklind Grant/research support from: Abbvie, BMS, Pfizer, MSD, Roche, Samsung, Lilly
DOI: 10.1136/annrheumdis-2017-eular.4651

THU0653 PREVENTING RHEUMATOID ARTHRITIS: A GENERAL POPULATION PILOT STUDY ON PERSPECTIVES OF THE RISK OF DEVELOPING THE DISEASE AND POTENTIAL PREVENTATIVE INTERVENTIONS

M. Harrison^{1,2}, N. Bansback^{1,2}, L. Spooner¹, K. Milbers², C. Koehn³, M. Hudson⁴. ¹University of British Columbia; ²Centre for Health Evaluation and Outcome Sciences; ³Arthritis Consumer Experts, Vancouver; ⁴McGill University, Montreal, Canada

Background: Evidence suggests that treatment of people at risk of rheumatoid arthritis (RA) with anti-rheumatic drugs could prevent the onset of disease, and there are ongoing randomized controlled trials on the efficacy of preventing RA. However even if these trials are successful, there will be uncertainty around the potential benefits of these programs in practice; namely, the ability to predict those at risk of RA, exact benefits and risks, and inconvenience of treatment.

Objectives: To determine the features of a preventative treatment program that are likely to be acceptable to pre-symptomatic people at high risk of RA. Our focus is on preferences for treatment, the values and most important attributes of a preventative treatment program, and the likely uptake of preventative treatment. In this pilot study we sought general population preferences.

Methods: A discrete choice experiment was administered to a US general population sample, asking participants to choose between sets of 2 hypothetical preventative RA treatments, then between their preferred treatment and "no treatment for now". The treatment (risk of developing RA, how treatment is taken, chance of side effects, certainty in estimates, health care provider's opinion) and test attributes (chance test is wrong, who recommends treatment) were identified in focus groups with RA patients, first-degree relatives of RA patients and rheumatologists. An efficient experimental design was developed using SAS and included 2 consistency checks. Responses were analyzed using a conditional logit regression model to estimate the significance and relative importance of attributes in influencing preferences.

Results: 201 respondents completed the survey. The majority of the sample was 25–54 years old (modal age category: 30–39 years (38%)) and 50% were female. 23 members (11%) reported having a physician diagnosis of RA, and 91 (45%) had a family member or close friend with RA. All attributes' levels significantly influenced treatment preferences, but risk reduction, how treatment is taken, and health care provider preference were most influential. Respondents were most willing to trade a reduction in risk of RA for a treatment preferred by their health care professional and an oral route of administration. Respondents had a similar strength of preference for reducing uncertainty in evidence and reducing the risk of side effects. The preferred preventative treatment was chosen over no treatment in 67% of choices.

Conclusions: Our survey suggests that people value the potential benefits of treatments, but equally value how the treatment is taken and the preference of their health care provider. The degree of confidence in the estimates of a treatment's risks and benefits is as important to people as the risk of side effects. The uptake of a preventative strategy will depend on these key factors. This evidence will help policymakers understand whether different preventative treatment strategies are likely to be acceptable to people they are offered to.

Acknowledgements: This work was supported by a grant from the Canadian Rheumatology Association through the Canadian Initiative for Outcomes in Rheumatology Care (CIORA).

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2170

THU0654 THE INFLUENCE OF RISK PRESENTATION FORMAT ON WILLINGNESS TO START A MEDICATION

R. Cozmuta¹, L. Fraenkel², E. Wilhelms³, V. Reyna⁴, J. Nolte⁴. ¹Emory University, Atlanta; ²Yale University, New Haven; ³Vassar College, Poughkeepsie, NY; ⁴Cornell University, Ithaca, NY, United States

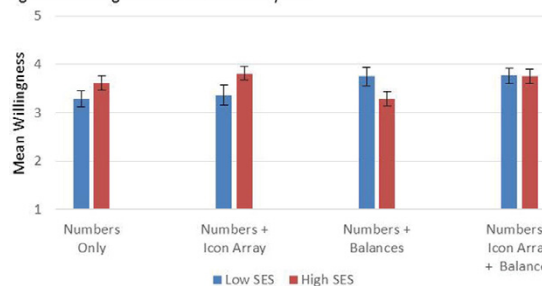
Background: Patients with rheumatoid arthritis frequently refuse to escalate care because they overweight the probability of adverse events. Effectively communicating risk information to patients is difficult. Several approaches have been developed to facilitate comparative risks; however, recent data suggest that current approaches have a limited impact on risk perceptions and willingness to take medication.

Objectives: The objective of this study was to examine whether an icon array (IA), an illustration of the gist of how medications regulate the immune system (a series of balance beams), or both influence willingness to start a medication.

Methods: Patients with a rheumatic disease were mailed a survey in which they were asked to imagine that their symptoms had worsened and that their physician was recommending a new medication. We varied the probability of an adverse event (pneumonia requiring hospitalization): 2% or 0.2%, and the risk presentation format: numbers, numbers + IA, numbers + balance beams (BB), or numbers + both. Route of administration, benefit, and cost were held constant. Each subject responded to a single, randomly-assigned scenario. We controlled for socioeconomic status (SES), using a variable including both difficulty paying for medications as well as education, in a full-factorial model testing willingness to take the medication (measured on a 5-point scale).

Results: Of 1453 surveys, 465 patients completed the survey. Overall, the mean (SD) age was 59.0 (14.8); 79.7% were female; 83.2% White and 39.1% were classified as having low SES. There were no statistical differences in patient characteristics across the risk presentation formats. Willingness to start the medication was predicted by the interaction between the risk presentation format and SES ($F = 2.9$, $p = 0.03$). Willingness by SES status is described in the Figure 1. Among low SES subjects, addition of an IA did not affect willingness compared to the numbers-only format. In contrast, addition of BB (mean difference = 0.47, $p = 0.07$), or both IA and BB increased willingness (mean difference = 0.48, $p = 0.04$). Among high SES subjects, addition of an IA or BB or both did not influence willingness compared to the numbers-only format. However, both formats including an IA increased willingness compared to the BB format among high SES subjects (mean difference IA vs BB = 0.53, $p = 0.01$; mean difference IA vs IA + BB = 0.48, $p = 0.02$).

Figure 1. Willingness across Formats by SES



Conclusions: SES affects how subjects respond to risk presentation formats. IA marginally increases willingness in high SES subjects, while BB increases willingness in low SES subjects; when both IA and BB are present, SES differences disappear. BB, when not accompanied by an IA, may decrease willingness in high SES subjects. These results demonstrate the differential effects of risk presentation formats, and highlight the need to identify mechanisms underlying their effects when implementing decision-support tools.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5169

THU0655 DO VISUAL DECISION AIDS HELP PATIENTS CORRECTLY DIFFERENTIATE BETWEEN A 2% AND A 0.2% RISK?

R. Cozmuta¹, L. Fraenkel², E. Wilhelms³, V. Reyna⁴, J. Nolte⁴. ¹Emory University, Atlanta; ²Yale University, New Haven; ³Vassar College, Poughkeepsie, NY; ⁴Cornell University, Ithaca, NY, United States

Background: Studies have found that patients ignore probabilities when making treatment decisions.

Objectives: The objective of this study was to examine whether addition of an icon array (IA), a series of three consecutive balance-beam (BB) illustrations depicting how medications regulate the immune system, or both resulted in patients being able to better differentiate between an uncommon (2%) and rare (0.2%) adverse event (AE).

Methods: Patients currently being treated for a chronic inflammatory rheumatic disease were mailed a survey in which they were asked to imagine that their symptoms had recently worsened and that their physician was recommending a new medication. The medication was described using eight scenarios (manipulated using a 2x4 design). We varied the probability of a serious AE (pneumonia