BACKGROUND

- Evidence suggests treating people at high risk of rheumatoid arthritis (RA) with disease modifying anti-rheumatic drugs (DMARDs) could prevent the onset of disease.
- There are currently multiple ongoing randomized controlled trials studying the efficacy of preventing RA, for example: Rituximab, a biologic DMARD.
- Hydroxychloroquine, a non-biologic DMARD.
- While these trials are ongoing, uncertainty in the ability to predict those at risk of RA remains a challenge.

OBJECTIVE

To determine the features of a preventative treatment program for people at high risk of RA that is likely to drive demand in the general population.

PREference Elicitation Design

- We focus on preferences for treatment, the values and most important attributes of preventative treatment programs, and the likely uptake of preventative treatment.
- Discrete choice experiment (DCE) where respondents were:
  - Told to imagine a test had classified them as at high risk of developing RA.
  -Asked to choose between sets of 2 hypothetical preventative RA treatments, then between their preferred treatment and ‘no treatment for now’.
- The treatment attributes identified in focus groups with RA patients, first-degree relatives of RA patients and rheumatologists, were:
  1. Risk of developing RA.
  2. The way treatment is taken.
  3. Chance of side effects.
  5. Health care provider’s opinion.
- Respondents were also given a background scenario which described the chance that the test is wrong.
- Experimental design (SAS) developed 18 choice sets, blocked into 4 sets of 9 choices.

METHODS & ANALYSIS

- The DCE was given to a representative sample of the US general population via a market research panel.
- Responses were analyzed using a conditional logit regression model to estimate the significance and relative importance of attributes in influencing preferences.
- Potential uptake of the treatment was estimated using the opt-out question in part 2 of the survey.

SAMPLE

- 201 respondents started and completed all tasks in the survey.
- The majority were 25-54 years old (modal 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.

RESULTS

Discrete Choice Experiment

- All attributes’ levels significantly influenced treatment preferences, but the risk reduction, the way treatment is taken, and health care provider’s 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 similar strong preferences for reducing uncertainty in evidence and reducing risks of side effects.
- The preferred preventative treatment was chosen over no treatment in 67% of choices.

Potential uptake

- Across the 9 choices we asked people to make, when asked whether they would choose no treatment over the preferred treatment, between 24% and 49% preferred no treatment.

Survey

- 87% of respondents would be willing to pay something out of pocket for a preventative treatment (41% maximum $200; 39% maximum $1000; 7% maximum $5000)
- Only 9% believed that preventative treatment should be paid for by the government or health care system.

CONCLUSIONS

- The general population values the potential benefits of preventative treatments, but equally values how the treatment is taken and the preference of their health care provider.
- Highlighting the importance of agency and perceived asymmetry of information.
- The degree of confidence in a treatment’s risk/benefit estimates is as important to people as the risk of side effects.
- The uptake of a preventative strategy will depend on these key factors.
- Evidence from a full survey will help policymakers understand what preventative treatment strategies are likely to be acceptable to people to whom they are offered.