52.8% over 2.0 years of exposure to GLM and 45.2% over 1.6 year of exposure to GLM-IV.

Conclusion: In this real-world study of Canadian patients with RA, differences in baseline characteristics between patients treated with an anti-TNF over time and between agents shows potential selection biases when selecting a given therapy and may impact the proportion of patients achieving a target-specific outcome. Treatment significantly reduced disease activity and improved functionality in a similar fashion and were also safe and well tolerated.

Disclosure of Interests: Proton Rahman: None declared, Philip Baer Grant/research support from: Janssen sponsored study, Consultant for: Eli Lilly, Pfizer, Abbvie, Amgen, Merck, Novartis, Sanofi Genzyme, Paladin, Janssen, Johnson & Johnson, Symposiums and received support (including attendance at conferences, speaker honoraria) from Roche, Pfizer, Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Consultant for: Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Speakers bureau: Abbvie, Amgen, Eli Lilly, Novartis, Pfizer, Sandoz, Rafaat Farawi: None declared, Louis Bes-sette Grant/research support from: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Consultant for: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Celgene, Lilly, Novartis, Speakers bureau: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Lilly, Novartis, Milton Baker Grant/research support from: Janssen Sponsored Study, Raman Rai Consultant for: Janssen, Amgen, BMS, Roche, Abbvie, Pfizer, Merck, Novartis, Speakers bureau: Janssen, Amgen, Roche, BMS, Abbvie, John Kelsall Grant/research support from: Janssen Sponsored Study, Larissa Lisnevskia Grant/research support from: Janssen Sponsored Study, Jodie Reis Grant/research support from: Janssen Sponsored Study, Keltie Anderson Grant/research support from: Janssen Sponsored Study, Wojciech Olszynski Grant/research support from: Janssen sponsored study, Emmanuel Rampakakis: None declared, Odalis Asin Millian Employee of: Janssen’s Allen, Lehman Employee of: Employee of Janssen, Allen, Meagan Rachich Shareholder of: Janssen, Employee of: Janssen, Francois Nantel Shareholder of: Janssen, Employee of: Employee of Janssen


RITUXIMAB BIOSIMILAR NON-MEDICAL SWITCH – DOES IT WORK?

Muhammad Khurrum Nisar, Luton and Dunstable University Hospital, Rheumatology, Luton, United Kingdom

Background: Since the introduction of anti-TNF biosimilars in routine clinical practice, there has been a drive to implement the switch program for all biosimilars at the point of availability. Rituximab biosimilar was granted marketing authorisation by the EMA in February 2017. Our Trust was one of the first centres to embrace a CQUIN which required adoption of marketing authorisation by the EMA in February 2017. Our Trust was the first in the first few weeks of dose administration.

Methods: A list of all patients prescribed rituximab was extracted through a database. A ‘switch’ letter was drafted and sent to all patients including Truxima information sheet. Patients were given the opportunity to contact nurse helpline for information or if disease control worsened/adverse effects developed. We reviewed all relevant records and collected data on any adverse events and disease outcome on either side of the switch. Patients were reviewed as originally planned by their respective clinicians.

Results: 44 patients with RA on 2 g dose six-monthly were identified on rituximab. Four had stopped treatment prior to switching. All 40 agreed to switch to Truxima that was completed by February 2018. Mean age of switchers was 58.6 (range 26-80 years). Eight were men and remaining 32 (80%) were women. Fourteen (35%) were Asian, three were Afro-Caribbean and the rest (62%) were White Caucasian. DAS28 scores were available for all participants. Prior to the switch median DAS28 was 3.0 (range 0.6-5.1). Following the switch it was 2.95 (range 1.5-5.7).

Adverse events related to Rituximab biosimilar switch

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Previous Mabthera Cycles</th>
<th>Prior DAS28</th>
<th>Post switch DAS28</th>
<th>Final drug choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>F</td>
<td>1</td>
<td>3.5</td>
<td>5.1</td>
<td>Humira</td>
</tr>
<tr>
<td>70</td>
<td>M</td>
<td>3</td>
<td>2.1</td>
<td>1.8</td>
<td>Itchy scalp, brain fog Truxima</td>
</tr>
<tr>
<td>49</td>
<td>F</td>
<td>2</td>
<td>4.4</td>
<td>2.8</td>
<td>Vorinig, diarrhoea Mabthera</td>
</tr>
<tr>
<td>48</td>
<td>F</td>
<td>2</td>
<td>3.1</td>
<td>5.5</td>
<td>Palpitations, dizziness Mabthera</td>
</tr>
<tr>
<td>58</td>
<td>F</td>
<td>4</td>
<td>1.8</td>
<td>2.8</td>
<td>Headache, flushing Truxima</td>
</tr>
<tr>
<td>37</td>
<td>F</td>
<td>5</td>
<td>3.5</td>
<td>4.5</td>
<td>Body pains, headache, distocitalgia (hospitalised)</td>
</tr>
</tbody>
</table>

Conclusion: Our experience of switching rituximab patients is certainly not as smooth as it was for infliximab and etanercept. All were happy to switch after receiving a letter and having the opportunity to contact if necessary. Substantial annual cost savings of nearly €140,000 were achieved once the switch process completed. At group level there were no major differences in disease outcomes. However, 10% had severe sickness reaction with loss of efficacy and loss of confidence in the drug. One patient developed military TB despite having one previous originator cycle with no issues. We support the routine switching from originator to biosimilar rituximab however close monitoring is required certainly in the first few weeks of dose administration.

Disclosure of Interests: Muhammad Khurrum Nisar Grant/research support from: Roche, Chugai, MSD, Abbvie, Pfizer, BMS, Novartis, Celgene, Mallinckrodt, UCB and Lilly, Consultant for: Muhammad Nisar undertakes clinical trials and received support (including attendance at conferences, speaker fees and honoraria) from Roche, Chugai, MSD, Abbvie, Pfizer, BMS, Novartis, Celgene, Mallinckrodt, UCB and Lilly, Speakers bureau: Muhammad Nisar undertakes clinical trials and received support (including attendance at conferences, speaker fees and honoraria) from Roche, Chugai, MSD, Abbvie, Pfizer, BMS, Novartis, Celgene, Mallinckrodt, UCB and Lilly.


ASSOCIATION BETWEEN RHEUMATOID FACTOR STATUS AND DISCONTINUATION OF TUMOR NECROSIS FACTOR INHIBITORS DUE TO INEFFECTIVENESS IN RHEUMATOID ARTHRITIS

Yoshikazu Ogasaw4, Nobunori Takahashi1, Yoshishika Kojima2, Naoki Ishiguro2

1Nakatsuwaya Municipal General Hospital, Nakatsuwaya, Japan; 2Nagoya University Graduate School of Medicine, Nagoya, Japan

Background: As for the treatment of rheumatoid arthritis (RA), the influence of rheumatoid factor (RF) positivity on the long-term efficacy of tumor necrosis factor inhibitors (TNFi) is controversial.

Methods: This study included bio-naïve RA patients enrolled in the Tsuru- mai Biologic Communication Registry in Japan. The crude comparison of TNFi discontinuation due to ineffectiveness between seropositive and seronegative patients was analyzed using the cumulative incidence function of competing events and Gray test. We assessed the associations between baseline patient characteristics and discontinuation of TNFi therapy due to insufficient response using Fine-Gray proportional hazard regression. Fine-Gray proportional hazard analysis considered competing events of interest, including insufficient response, adverse event, pailation, and personal reasons.

Results: Demographic and clinical characteristics of each group are described in Table 1. There was a higher discontinuation rate due to insufficient response in RF positive patients than in RF negative patients using Gray test (Figure). RF positivity was significantly predictive of the discontinuation of TNFi therapy due to ineffectiveness using Fine-Gray proportional hazard regression analysis after adjusting for baseline characteristics, including age, sex, stage, class, disease activity at baseline, methotrexate use, and prednisolone use (Table 2).

Conclusion: Using Fine-Gray proportional hazard regression, we demonstrated that RF positivity was related to a higher discontinuation rate of TNFi therapy due to ineffectiveness in bio-naive RA patients.

Disclosure of Interests: Yoshikazu Ogawa: None declared, Nobunori Taka-
hashi Speakers bureau: AbbVie, Bristol-Myers Squibb, Chugai, Eisai, Mit-
subishi Tanabe, and Pfizer. YS has received speakers' fees from Astellas, Bristol-Myers Squibb, and Ono, Yoshishita Kojima Grant/research support from: Chugai Pharmaceutical, Investigator Initiated Study, Novar-
tis, Nippon Kayaku, Eli Lilly, Eisai, Speakers bureau: Chugai Pharmaceuti-
cal, Takeda Pharmaceutical, Pfizer, Eli Lilly Japan, Bristol Myers Squibb, Ono Pharmaceutical, Daiichi Sankyo, Astellas, UCB, Janssen Pharmaceuti-
cal, Tanabe Mitsubishi, Naoki Ishiguro Grant/research support from: Abb-
Vie, Ashai Kasei, Astellas, Chugai, Daiichi-Sankyo, Eisai, Kaken, Mitsubishi Tanabe, Otsuka, Pfizer, Takeda, and Zimmer Biomet,