Conclusion: UPA effectiveness appears to be confirmed. The safety profile of UPA 15 mg in real-world practice is consistent with data from Phase 3 SELECT studies, with no new safety signals.

REFERENCES:

Acknowledgements: NIL.
Disclosure of Interests: None Declared.
DOI: 10.1136/annrheumdis-2023-eular.5075

AB0482

CLINICAL SAFETY AND FEASIBILITY OF A NOVEL IMPLANTABLE NEUROIMMUNE MODULATION DEVICE FOR THE TREATMENT OF RHEUMATOID ARTHRITIS

Keywords: Rheumatoid arthritis, Randomized control trial, Non-pharmacological interventions


Group, Neurosurgery, Detroit, United States of America; of America; & Spine Associates, Neurosurgery, Charlotte, United States of America; States of America; Surgery, Oklahoma City, United States of America; of Bioelectronic Medicine, Manhasset, United States of America; Richardson: None declared.

8University of New Mexico Hospital, Neurosurgery, Albuquerque, United States of America; 9Marcus Neuroscience Institute, Neurosurgery, Valencia, CA) consists of 2 implanted components: a miniature, rechargeable, and two external components: a wireless charger and an iPad application device (POD) that holds the generator in close approximation to the nerve; Valencia, CA) consists of 2 implanted components: a miniature, rechargeable, and two external components: a wireless charger and an iPad application device (POD) that holds the generator in close approximation to the nerve; and the two external components: a wireless charger and an iPad application for programming the pulse generation. All subjects were implanted with the study device. One to three weeks after the implant procedure, subjects were randomly assigned to either active or sham stimulation (control). The safety of the surgical procedure, device, and device stimulation was blindly assessed after 12 weeks of stimulation therapy.

Results: All device implant procedures were completed with no intraoperative complications, infections, or surgical revisions. No unanticipated adverse events (AEs) were reported during the perioperative period and at the end of 12 weeks of follow-up. No study discontinuations were due to AEs, and no subjects died during the study. There were no serious AEs related to the device, stimulation, or explant procedures. There were two serious AEs related to the implant procedure: vocal cord paresis and prolonged hoarseness were reported in two subjects and are known risks of implanting a device on the vagus nerve. The vocal cord paresis resolved following vocal cord augmentation with injectable filler and speech therapy; the other SAE is ongoing and improving with speech therapy.

Conclusion: Initial results demonstrated that implantation and programming of the novel neuroimmune modulation device was safe, and the surgical procedure and device were well tolerated. Full results from this study, including the clinical efficacy, will be presented after the study is fully enrolled and data is analyzed to determine potential of neuroimmune modulation for treating rheumatoid arthritis.

REFERENCE:

Acknowledgements: NIL.
Disclosure of Interests: None declared.
DOI: 10.1136/annrheumdis-2023-eular.5077

AB0483

FILGOTINIB IS EFFECTIVE AND SAFE IN RA PATIENTS AFTER FAILURE TO MULTIPLE BDMARDS AND TO OTHER JAK INHIBITORS: DATA FROM A MONOCENTRIC PERSPECTIVE COHORT STUDY

Keywords: Rheumatoid arthritis, Real-world evidence, Targeted synthetic drugs

F. Arru1, M. Zen1, M. Salvato1, F. Vesentini1, K. Botsios1, T. Del Rossi3, M. Favaro1, A. Giolo1, A. Doria1.

1University of Padova, Department of Medicine DIMED, Padua, Italy

Background: An urgent need exists for differentiated RA therapies that are safer and cost-saving. We have to explore treatment approaches for non-responders to disease-modifying anti-rheumatic drugs (DMARDs). Electrical stimulation of the vagus nerve activates the inflammatory reflex and has been shown to inhibit the production and release of inflammatory cytokines and decrease clinical signs and symptoms in chronic inflammatory diseases, including rheumatoid arthritis [1].

Objectives: The RESET-RA Study (NCT04593964) was designed to determine the safety and efficacy of a novel neuroimmune modulation device for treating rheumatoid arthritis. Presented here are data on the safety of the surgical implantation and use of this device in the first 60 human subjects enrolled in the study.

Methods: The RESET-RA study is a randomized, double-blind, sham-controlled, multi-center, two-stage pivotal study to evaluate the safety and efficacy of a novel neuroimmune modulation device in patients with moderate-to-severe RA who are incomplete responders or are intolerant to one or more biologic or targeted synthetic DMARDs. The device system (SetPoint Medical, Valencia, CA) consists of 2 implanted components: a miniature, rechargeable, leadless pulse generator that is surgically implanted in the neck on the left vagus nerve and a silicon sleeve referred to as a positioning and orientation device (POD) that holds the generator in close approximation to the nerve and two external components: a wireless charger and an iPad application for programming the pulse generation. All subjects were implanted with the study device. One to three weeks after the implant procedure, subjects were randomly assigned to receive either active or sham stimulation (control). The safety of the surgical procedure, device, and device stimulation was blindly assessed after 12 weeks of stimulation therapy.

Results: We enrolled 58 RA patients: 33 (56%) on filgotinib monotherapy, 5 (9%) on bDMARD-naive, 15 (26%) already treated with ≥ 2 classes of bDMARDS (multi-failure), 9 (17%) previously treated with JAK-inhibitors. Means±SD follow-up was 9±5 months, with 30 (52%) and 8 (14%) patients having ≥6 and ≥12-month follow-up (fu). Among patients with ≥6 months of follow up there was a significant improvement in swollen and tender joint counts, PtGA, PhGA and composite disease activity measures (Table 1). Seventeen patients (57%) achieved complete disease remission. Disease activity was measured by DAS28-CRP, MRI, and SDI, TJC, SJC, patients (Ph) and physician (Ph) global assessment (0-10), the proportion of patients achieving DAS28-remission, concomitant cDMARDs and glucocorticoids (GC), comorbidities, and adverse events (AE) during filgotinib treatment were collected. Discontinuations for inefficacy or AE were recorded.

Results: We enrolled 58 RA patients: 33 (56%) on filgotinib monotherapy, 5 (9%) bDMARD-naive, 15 (26%) already treated with ≥ 2 classes of bDMARDS (multi-failure), 9 (17%) previously treated with JAK-inhibitors. Means±SD follow-up was 9±5 months, with 30 (52%) and 8 (14%) patients having ≥6 and ≥12-month follow-up (fu). Among patients with ≥6 months of follow up there was a significant improvement in swollen and tender joint counts, PtGA, PhGA and com-
Table 1. Characteristics of AR patients treated with filgotinib at baseline, 6, 12

<table>
<thead>
<tr>
<th>Demographics and RA history</th>
<th>Baseline</th>
<th>6 months</th>
<th>p-value (m0 vs m6)</th>
<th>12 months</th>
<th>p-value (m6 vs m12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N of patients</td>
<td>58</td>
<td>N of patients</td>
<td>30</td>
<td>30</td>
<td>.20</td>
</tr>
<tr>
<td>Age, y</td>
<td>60 ± 12</td>
<td>TJC, mean SD±</td>
<td>7 ± 6</td>
<td>4 ± 5</td>
<td>.31</td>
</tr>
<tr>
<td>Caucaisan</td>
<td>47 (71%)</td>
<td>SJC mean ± SD</td>
<td>4 ± 3</td>
<td>2 ± 3</td>
<td>.003</td>
</tr>
<tr>
<td>Sex - female n(%)</td>
<td>45 (84%)</td>
<td>PGA mean ± SD</td>
<td>6 ± 3</td>
<td>4 ± 2</td>
<td>.001</td>
</tr>
<tr>
<td>BMI</td>
<td>23 ± 3</td>
<td>PhGA mean ± SD</td>
<td>6 ± 2</td>
<td>3 ± 2</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>RF+ / ACPA+ n(%)</td>
<td>38 (71%)/32 (60%)</td>
<td>CDAL, mean±SD</td>
<td>22 ± 10.8</td>
<td>13 ± 11.1</td>
<td>.016</td>
</tr>
<tr>
<td>Symptoms duration, y</td>
<td>18 ± 11</td>
<td>SDAL, mean±SD</td>
<td>25 ± 11</td>
<td>16 ± 11.5</td>
<td>.073</td>
</tr>
<tr>
<td>Charlson</td>
<td>3.3 ± 1.7</td>
<td>DAS28-CRP, mean±SD</td>
<td>3.5 ± 1.3</td>
<td>2 ± 0.9</td>
<td>.001</td>
</tr>
<tr>
<td>Erosions n(%)</td>
<td>38 (71%)</td>
<td>Multiflare</td>
<td>3 ± 1.5</td>
<td>1 ± 0.9</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Extra-articular disease n(%)</td>
<td>16 (30%)</td>
<td>Previous JAKi</td>
<td>4 ± 1.5</td>
<td>2 ± 0.9</td>
<td>n.c.</td>
</tr>
<tr>
<td>Lung n(%)</td>
<td>7 (13%)</td>
<td>DAS28-CRP remission n(%)</td>
<td>5 (17%)</td>
<td>17 ± 8.2</td>
<td>.0017</td>
</tr>
<tr>
<td>Rheumatoid nodules n(%)</td>
<td>4 (8%)</td>
<td>Multiflare</td>
<td>2 ± 1.5</td>
<td>1 ± 0.9</td>
<td>n.c.</td>
</tr>
<tr>
<td>Peripheral neuropathy n(%)</td>
<td>7 (14%)</td>
<td>Previous JAKi</td>
<td>1.5 (12.5%)</td>
<td>5 ± 3.2</td>
<td>n.c.</td>
</tr>
<tr>
<td>Cardiovascular n(%)</td>
<td>1 (2%)</td>
<td>Multiflare</td>
<td>18 (60%)</td>
<td>14 (40%)</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

| Symptoms of disease n(%) | 4 (8%) | Multiflare | 18 (60%) | 14 (40%) | n.s. | 3 (37%) | n.s.|
| e disease n(%) | 4 (8%) | Multiflare | 18 (60%) | 14 (40%) | n.s. | 3 (37%) | n.s.|
| COPD | 2 (4%) | Multiflare | 18 (60%) | 14 (40%) | n.s. | 3 (37%) | n.s.|

Within the first 2 weeks of treatment. Medications reviewed: (including chronic pain and fibromyalgia), sleep pattern, and features of low mood were beyond the scope of the survey and thus not asked about.

Conclusion: Whilst acknowledging the modest sample size and simplicity of our patient survey, our data suggests some benefit of JAKi treatment on fatigue in patients with RA. The benefits seen are broadly in keeping with what is seen in our wider local clinical practice. Our survey suggests that the improvement in fatigue can occur rapidly, with the majority of patients noting improvement within just 2 weeks. More detailed (including qualitative) data would be useful to support these initial findings from this patient survey and explore the role of JAKi treatment on fatigue in patients with RA.

REFERENCES:

Acknowledgements: NIL.


AB0485

SAFETY ANALYSIS OF JAKINIBS IN REAL CLINICAL PRACTICE IN A COHORT OF 116 PATIENTS

Keywords: Safety, Disease-modifying drugs (DMARDs), Rheumatoid arthritis

L. Salvatierra Velasco1, A. Belmonte Mora3, J. Rubio Ubeda3, P. Morales-Garrido1, J. Salvatierra1, E. Raya1. 1Hospital Universitario Clinico San Cecilio, Reumatología, Granada, Spain

Background: Janus kinase inhibitors (JAKINIBs) have demonstrated efficacy in the treatment of rheumatoid arthritis (RA) and spondyloarthritides (SpA), although their safety profile continues to be analysed due to possible increase in adverse events (AEs) in relation to anti-TNFs (mild and severe infections, haematological alterations, thromboembolism, increase in neoplasias).

Objectives: To evaluate in real clinical practice the AEs of JAKINIBs in a cohort of patients with RA and SpA. In addition, adherence and reasons for discontinuation (1st or 2nd failure, AE) are analysed.

Methods: Observational study of 116 patients diagnosed with RA or SpA who received treatment with JAKINIBs (tofacitinib, baricitinib, upadacitinib) after failure of treatment with different classical synthetic (FAMEsc) or biological (FAMEB) disease-modifying drugs. The following data were analysed: demographic characteristics of the patients, years of disease progression, 1st or 2nd (FAMEb) disease-modifying drugs. The following data were analysed: demographic characteristics of the patients, years of disease progression, 1st or 2nd failures and AE.

Results: Mean age was 52 years, with Baricitinib being older (60 years -SD 13.6), higher prevalence of females in all groups, and a disease progression time of about 10 years. Mean number of FAMEsc was 1.6 and mean number of FAMEB was 2.3 to Tofacitinib(Tofa), 2.76 to Baricitinib(Bari) and 4.4 to Upadacitinib(Upa). 71 (63%) patients had active corticosteroid therapy. The median time treatment with Tofa was 8.8 months, Bar 9.5 and Upa 2.4 months. Most frequent AEs with Tofa were urin tract infections(UTI) (11.9%; 7 cases and headaches (8.47%; 5 cases). There were 3 cases of herpes zoster (5.1%), one of which was recurrent, and 2 cases respectively of tachycardia and gastrointestinal intolerance (3.4%). With Baricitinib, 2(5%) cases of UTI and 2(5%) of influenza A were reported. Most