Table 1. Demographic and Rheumatic disease specific data of COVID-19 patients

<table>
<thead>
<tr>
<th>Age</th>
<th>All patients (n=52)</th>
<th>Hospitalized (n=19)</th>
<th>Non-hospitalized (n=33)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.73 (10.829)</td>
<td>50.53 (10.905)</td>
<td>42.97 (9.923)</td>
<td></td>
<td>0.018</td>
</tr>
<tr>
<td>Gender (Male/Female)</td>
<td>21 (40.4)/31 (60.2)</td>
<td>7/12 (63.2)</td>
<td>14 (42.4)</td>
<td>19 (57.6)</td>
</tr>
<tr>
<td>BMI</td>
<td>Normal (27.319)</td>
<td>8 (42.1)</td>
<td>19 (57.6)</td>
<td>0.528</td>
</tr>
<tr>
<td>Disease</td>
<td>RA (18.346)</td>
<td>8 (42.1)</td>
<td>10 (30.8)</td>
<td>0.287</td>
</tr>
<tr>
<td>Comorbidities</td>
<td>DM2 (12.631)</td>
<td>5 (26.3)</td>
<td>12 (36.4)</td>
<td>0.335</td>
</tr>
<tr>
<td>Treatment</td>
<td>Others (6.115)</td>
<td>3 (15.8)</td>
<td>3 (9.1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HTN (12.25)</td>
<td>8 (42.1)</td>
<td>5 (15.2)</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>CVD (2.38)</td>
<td>10 (5.5)</td>
<td>0 (0)</td>
<td>0.129</td>
</tr>
<tr>
<td></td>
<td>Hypothyroidism (12.231)</td>
<td>4 (21.1)</td>
<td>8 (24.2)</td>
<td>0.537</td>
</tr>
<tr>
<td></td>
<td>Multimorbidity (8.15)</td>
<td>6 (31.6)</td>
<td>2 (6.1)</td>
<td>0.021</td>
</tr>
<tr>
<td>Duration</td>
<td>Corticosteroids</td>
<td>0</td>
<td>&gt;2 years</td>
<td>2 (10.5)</td>
</tr>
<tr>
<td></td>
<td>DMARDs</td>
<td>0</td>
<td>&gt;2 years</td>
<td>1 (5.3)</td>
</tr>
<tr>
<td></td>
<td>Corticosteroids</td>
<td>0</td>
<td>&gt;2 years</td>
<td>1 (5.3)</td>
</tr>
</tbody>
</table>

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3137

POS1236

IMPACT OF COVID-19 ON INITIATION AND RENEWAL OF BIOTHERAPIES AND TARGETED SYNTHETIC TREATMENTS

P. Richet1, M. Allez2, V. Descamps3, L. Perra4, S. Pilet5, M. Maravic6

1Lariboisiere Hospital, Rheumatology, France; 2St Louis Hospital, Gastroenterology, Paris, France; 3Bichat Hospital, Dermatology, Paris, France; 4IQVIA, Ai & Data engine, Courbevoie, France; 5IQVIA, Analytic solutions, Courbevoie, France; 6IQVIA, Real World Solutions, Courbevoie, France

Background: During the epidemic’s peak of COVID-19, scientific societies published recommendations on biotherapy and targeted synthetic treatment (B/TST) use in patients with chronic articular inflammatory diseases, inflammatory bowel diseases, and psoriasis.

Objectives: The objective was to evaluate the impact of COVID-19 in France on initiation and renewal of B/TST.

Methods: LRx contains all anonymized medication dispenses prescribed in outpatient care in a representative panel of French retailers pharmacies, including data of near 40 million patients. The impact of B/TST initiation and renewal were studied using 2019 as reference and dispense deliveries data of pharmacies with regular flow in order to perform the comparison. B/TST considered were abatacept, anti-TNF, anti-IL6, anti-IL17, anti-IL12/23 or anti-IL23, JAK inhibitors (JAK) and other classes such as apremilast, aminolacyslates (AS), hydroxychloroquine (HCQ), and methotrexate (MTX). A treatment initiated was defined as a treatment not delivered in the past 12 months, and conversely for a treatment renewal. Results were presented as raw one and expressed in percentage of patients having at least one B/TST delivery in each therapeutic classes of interest in 2020 compared to 2019 used as reference year (period from week 12 to week 19 considered and corresponding to the lockdown period in France).

Results: During the lockdown period, a decrease in initiation was observed for patients treated with: abatacept (405 in 2019 vs 227 in 2020, -44%, p<0.001), anti-TNF (1156 vs 1058, -10%, p<0.001), anti-IL17 (415 vs 206, -50%, p<0.001), anti-IL12-23 (395 vs 339, -12%, p=0.016), JAKi (289 vs 174, -39%, p=0.006), contrasting with an increase for Tocilizumab (117 vs 445, +152%, p<0.01). We found a decrease of 7% (2171 vs 2015, p=0.035), 44% (405 vs 227 p<0.001), 30% (3430 vs 2390, p<0.001) of AS, apremilast and MTX initiation, respectively, and an increase of 173% (1708 vs 4671, p<0.01) of HCQ initiation. No decrease for the renewal of B/TST was observed

Conclusion: During the epidemic’s peak, initiation of AS, MTX, biotherapies (except for tocilizumab), and JAKi dramatically decreased without impacting their renewal. Two treatments were mainly initiated, tocilizumab probably due to a switch from intravenous to subcutaneous injection and HCQ in relation to its presumably effect on COVID-19. Overall, recommendations from scientific societies have been followed.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3146

POS2137

ALGORITHM IDENTIFYING CHRONIC INFLAMMATORY DISEASES TREATED BY BIOTHERAPY AND/OR TARGETED SYNTHETIC TREATMENTS IN OUTPATIENT CARE IN FRANCE: FEASIBILITY, PRELIMINARY RESULTS, AND IMPACT OF COVID-19

P. Richet1, M. Allez2, V. Descamps3, L. Perra4, S. Pilet5, M. Maravic6

1Lariboisiere Hospital, Rheumatology, Paris, France; 2St Louis Hospital, Gastroenterology, Paris, France; 3Bichat Hospital, Dermatology, Paris, France; 4IQVIA, Ai & Data engine, Courbevoie, France; 5IQVIA, Analytic solutions, Courbevoie, France; 6IQVIA, Real World Solutions, Courbevoie, France

Background: Discriminating chronic inflammatory diseases under biotherapy and/or targeted synthetic treatments (B/TST) using medico-administrative databases are challenging but required for medic-economic analyses focusing on these diseases.

Objectives: The objective was to evaluate the feasibility of using a medication dispense data in order to identify patients with chronic inflammatory diseases under B/TST in outpatient care setting and evaluate the impact of COVID-19 in France

Methods: LRx contains all anonymized medication dispenses prescribed in outpatient care in a representative panel of French retailers pharmacies, including data of near 40 million patients. Patients having at least one B/TST delivered in 2019 were selected. An algorithm was constructed using different steps, including a machine learning step by transfer learning applied in patient classified as having a rheumatoid condition (28%). A significant decrease of biotherapy initiation was found for patients treated with: abatacept (405 in 2019 vs 227 in 2020, -44%, p<0.001), anti-TNF (1156 vs 1058, -10%, p<0.001), anti-IL17 (415 vs 206, -50%, p<0.001), anti-IL12-23 (395 vs 339, -12%, p=0.016), JAKi (289 vs 174, -39%, p=0.006), contrasting with an increase for Tocilizumab (117 vs 445, +152%, p<0.01). We found a decrease of 7% (2171 vs 2015, p=0.035), 44% (405 vs 227 p<0.001), 30% (3430 vs 2390, p<0.001) of AS, apremilast and MTX initiation, respectively, and an increase of 173% (1708 vs 4671, p<0.01) of HCQ initiation. No decrease for the renewal of B/TST was observed

Conclusion: During the epidemic’s peak, initiation of AS, MTX, biotherapies (except for tocilizumab), and JAKi dramatically decreased without impacting their renewal. Two treatments were mainly initiated, tocilizumab probably due to a switch from intravenous to subcutaneous injection and HCQ in relation to its presumably effect on COVID-19. Overall, recommendations from scientific societies have been followed.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3165