Disclosure of Interests: Maria Powell: None declared, Vivian Bykerk: Grant/research support from: Mallinckrodt, BMS, Crescendo Biosciences, Sanofi/Regeneron., Consultant for: Amgen, Pfizer, UCB, Scipher, Sanofi/Genzyme/Regeneron, Orit Schier: None declared, Janet Pope Consultant for: Eli Lilly and Company, Susan J. Bartlett Consultant for: Pfizer, UCB, Lilly, Novartis, Merck, Jansen, Abbvie, Louis Bessette 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, Merck, Celgene, Sanofi, Lilly, Novartis, Speakers bureau: Amgen, BMS, Janssen, Roche, UCB, AbbVie, Pfizer, Merck, Celgene, Sanofi, Lilly, Novartis, Gilles Boire Grant/research support from: Investigator-initiated studies: Amgen, Abbvie, BMS, Eli Lilly, Merck, Novartis, Pfizer, Consultant for: Advisory boards: Amgen, BMS, Celgene, Eli Lilly, Pfizer, Speakers bureau: Merck, BMS, Pfizer, CaroL Hitchon Grant/research support from: Pfizer, UCB (unrelated studies), Edward Keystone Grant/research support from: AbbVie, Amgen, Bristol-Myers Squibb, F. Hoffmann-La Roche Inc, Gilead, Janssen Inc, Lilly Pharmaceuticals, Pfizer Pharmaceuticals, Sanofi-Aventis, Consultant for: AbbVie, Amgen, AstraZeneca Pharma, Biotech, Bristol-Myers-Squibb Company, Celtrion, Crescendo Biosciences, F. Hoffmann-La Roche Inc, Genentech Inc, Gilead, Janssen Inc, Lilly Pharmaceuticals, Merck, Pfizer Pharmaceuticals, Sanzoz, UCB, Speakers bureau: Amgen, Abbvie, Bristol-Myers Squibb Canada, F. Hoffmann-La Roche Inc., Janssen Inc., Merck, Pfizer Pharmaceuticals, Sanofi Genzyme, UCB, Carter Thorne Grant/research support from: Investigator-initiated studies: Amgen, Abbvie, BMS, Eli Lilly, Merck, Novartis, Pfizer, Consultant for: Advisory board: Abbvie, Amgen, Celgene, Lilly, Medexus/Medac, Merck, Novartis, Pfizer, Sanofi, Consultant: Abbvie, Centocor, Janssen, Lilly, Medexus/Medac, Pfizer, Speakers bureau: Medexus/Medac, Diane Tin: None declared, Marie-France Valois: None declared, Glen Hazelwood: None declared.

Disclosure of Interests: Fausto Salaffi Consultant/research support from: Abbvie, Roche, Novartis, BMS, Pfizer, Sanofi, Speakers bureau: Abbvie, Roche, Novartis, Pfizer, Sanofi, BMS, marina carotti Speakers bureau: abbvie pfizer novartis roche bms sanofi, Marco Di Carlo: None declared, Marka Tardella: None declared, Andrea Giovagnoni: None declared. DOI: 10.1136/annrheumdis-2019-eular.7317

Methods: We retrospectively evaluated the data of RA patients referred to an italian rheumatological center from 1/1/2014 to 30/6/2018. We extrapolated clinical (age, gender, age at onset the RA), laboratory (rheumatoid factor [RF] and anti-citrullinated protein antibodies [ACPA]), respiratory functional data ([forced vital capacity (FVC) and single-breath diffusing capacity for carbon monoxide (DLco)], patient-centred measures of dyspnea (PCMD) (modified Borg Dyspnea Index and VAS for breathing), health assessment questionnaire-disability index (HAQ-DI), and HRCT. HRCT abnormalities were scored using a conventional visual reader-based score (CoVR)(1) and a computer-aided method (CaM)(2).

The relationships among the two HRCT scores, PFTs and PCMD were calculated using Pearson’s correlation. The AUC-ROC curve was calculated to determine the discriminative performance of measures between patients with and without ILD. Multivariable regression model was used to assess the strength of association between ILD and RA features.

Results: 151 patients with RA were included (45 males and 106 females, mean age of 53.4 ± 7.6 years). We identified ILD in 29 of 151 patients (19.2%). Usual interstitial pneumonia was the most common pattern on HRCT. Patients with ILD were older (p<0.01), their age at RA-onset and HAQ-DI were higher (respectively with p<0.01 and p<0.05) than patients without RA-ILD. RF positivity and titer were similar in the two groups, whereas ACPA positivity and titre were higher in ILD group (p<0.02). Extent and severity of ILD, total CoVR and CaM score correlated closely with DLco and PCMD (both with p<0.0001). A reduced DLco was the most sensitive test to predict the presence of ILD on HRCT (AUC-ROC, 0.811±0.037). Multivariate analysis showed that older age (p<0.0001), age at RA onset, (p=0.025), ACPA titers (p<0.004) and smoking habit (p=0.006) were independent explanatory variables of HRCT damage.

Conclusion: ILD is a frequent feature of RA. RA-ILD is associated with age, age at RA-onset, smoking habit, and ACPA titer. DLco seems the most sensitive measure to predict ILD on HRCT scan, followed by PCMD.

REFERENCES:

Disclosure of Interests: Fausto Salaffi Grant/research support from: Abbvie, Roche, Novartis, BMS, Pfizer, Sanofi, Speakers bureau: Abbvie, Roche, Novartis, Pfizer, Sanofi, BMS, marina carotti Speakers bureau: Abbvie, Roche, Novartis, BMS, Lips, Sanofi, Marco Di Carlo. None declared, Marka Tardella: None declared, Andrea Giovagnoni: None declared. DOI: 10.1136/annrheumdis-2019-eular.7317

Methods: We developed a smartphone app to deliver daily disease assessments to patients with RA (RAapp). The app was tested as part of a randomized controlled trial examining the potential clinical benefits of RAapp compared to a wait-list control. These analyses focus only on the adherence of patients who received RAapp and completed the 6-month trial. We recruited RA patients from the rheumatology practice at a large academic medical center in the US. Patients with at least 16years of age and without a diagnosis of RA were included (n=60). RAapp was downloaded by patients through a password protected link on to the patient’s phone after consent. Patients’ received daily notifications regarding disease

Background: Patients increasingly are asking for tools to improve self-management. Electronic patient reported outcomes (ePROs) transmitted digitally allow patients to both communicate with their clinicians between visits and help track their own disease activity. While several tools have been developed in rheumatology, few data have been reported regarding patient adherence.

Objectives: To examine patient adherence to a smartphone app for rheumatoid arthritis (RAapp).

Methods: We developed a smartphone app to deliver daily disease assessments to patients with RA (RAapp). The app was tested as part of a randomized controlled trial examining the potential clinical benefits of RAapp compared to a wait-list control. These analyses focus only on the adherence of patients who received RAapp and completed the 6-month trial. We recruited RA patients from the rheumatology practice at a large academic medical center in the US. Patients with at least 16years of age were given written informed consent, be fluent in English, and have a smartphone with an iOS or android operating system. RAapp was downloaded by patients through a password protected link on to the patient’s phone after consent. Patients’ received daily notifications regarding disease

Background: Intestinal lung disease (ILD) causes significant morbidity and mortality in patients with rheumatoid arthritis (RA). An international consensus about the identification of a subgroup of RA-patients with an increased risk to develop ILD is still lacking.

Objectives: To assess: (a) the prevalence of ILD involvement in RA on high resolution computed tomography (HRCT) scan; (b) the relationships between pulmonary function tests (PFTs), patient-centred measures and ILD; (c) the potential risk factors that contribute to ILD in RA-patients.

Methods: We retrospectively evaluated the data of RA patients referred to an italian rheumatological center from 1/1/2014 to 30/6/2018. We extrapolated clinical (age, gender, age at onset the RA), laboratory (rheumatoid factor [RF] and anti-citrullinated protein antibodies [ACPA]), respiratory functional data ([forced vital capacity (FVC) and single-breath diffusing capacity for carbon monoxide (DLco)], patient-centred measures of dyspnea (PCMD) (modified Borg Dyspnea Index and VAS for breathing), health assessment questionnaire-disability index (HAQ-DI), and HRCT. HRCT abnormalities were scored using a conventional visual reader-based score (CoVR)(1) and a computer-aided method (CaM)(2).

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Conclusion: ILD is a frequent feature of RA. RA-ILD is associated with age, age at RA-onset, smoking habit, and ACPA titer. DLco seems the most sensitive measure to predict ILD on HRCT scan, followed by PCMD.

REFERENCES:
assessments, including disease activity (RADAI), function (MDHAQ), pain (PROSIS), fatigue (PROMIS), sleep (PROMIS), and depression (PROMIS). The current set of analyses focused on adherence to RAapp, overall, by scale, and over the 6 months of the trial. We examined adherence to RAapp over the duration of the study and examined factors related to adherence using mixed regression models. Factors tested included patient age, sex, educational attainment, and baseline CDAI. 

Results: 75 patients received RAapp and have data included in these analyses (6 patients are in the last month of follow-up). 60 (80%) were female; age breakdown was 24% < 45 years, 49% 45-64 years, and 27% 65 years and over; and educational attainment was 19% high school, 59% college, and 23% beyond college. Baseline CDAI demonstrated 20% in remission, 45% low, 24% moderate, and 11% high disease activity. During the 6-month study, median adherence to the RAapp daily questionnaires was 81.6% (interquartile range 48.4% to 92.3%). Broken down by the type of questionnaire, median adherence was: disease activity 79.8%; pain 80.8%; mood 76.2%; function 79.3%; fatigue 77.0%; and sleep 77.8%. Adherence to the daily questionnaires was highest in the first month but decreased a small amount each of the following months (see Figure, p for trend < 0.001). The only significant predictor of higher adherence was age 65 or over (p = 0.04). High baseline CDAI was associated with a lower adherence but was not statistically significant (p = 0.07).

Conclusion: We developed and tested an ePRO app for RA (RAapp). Among a large group of patients, adherence to the app was good but declined slightly over time. There was no substantial variation in adherence with different ePRO scales. Older age was the only significant predictor of adherence.

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Abstract THU0156 – Table 1. Unadjusted incidence rates for idiopathic facial nerve palsies.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Number of events</th>
<th>Incidence rate (per 1000 patient years under treatment)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>csDMARDs</td>
<td>3</td>
<td>0.2</td>
<td>0.0-0.5</td>
</tr>
<tr>
<td>Etanercept (original)</td>
<td>4</td>
<td>0.7</td>
<td>0.2-1.6</td>
</tr>
<tr>
<td>Etanercept (biosimilar)</td>
<td>1</td>
<td>1.9</td>
<td>0.1-6.9</td>
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<tr>
<td>SB4</td>
<td></td>
<td>0.0</td>
<td>0.0-1.0</td>
</tr>
<tr>
<td>Golimumab</td>
<td>1</td>
<td>0.7</td>
<td>0.0-2.4</td>
</tr>
<tr>
<td>Rituximab</td>
<td>5**</td>
<td>0.8</td>
<td>0.3-1.6</td>
</tr>
<tr>
<td>Abatacept</td>
<td>1</td>
<td>0.3</td>
<td>0.0-1.2</td>
</tr>
<tr>
<td>Tobulimab</td>
<td>3</td>
<td>0.5</td>
<td>0.1-1.1</td>
</tr>
<tr>
<td>All</td>
<td>17</td>
<td>0.4</td>
<td>0.2-0.6</td>
</tr>
</tbody>
</table>

* One patient was exposed to both Etanercept (original) and Rituximab at the time of event.

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