### Supplemental material

**Table 1: Clinical examination pre and post lockdown in relation to physical therapy**

<table>
<thead>
<tr>
<th>BASMI</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>pre lockdown</td>
<td>post lockdown</td>
<td>difference</td>
<td>p</td>
<td></td>
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</tr>
<tr>
<td>Tragus-to-wall (cm)</td>
<td>11.2 ± 1.29</td>
<td>11.2 ± 0.84</td>
<td>0.0 ± 1.46</td>
<td>0.919</td>
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<tr>
<td>Modified Shöber (cm)</td>
<td>14.2 ± 0.87</td>
<td>14.5 ± 1.02</td>
<td>0.4 ± 0.98</td>
<td>0.035</td>
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</tr>
<tr>
<td>Cervical rotation left (°)</td>
<td>80.0 ± 8.75</td>
<td>80.1 ± 12.65</td>
<td>0.1 ± 12.57</td>
<td>0.956</td>
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<tr>
<td>Cervical rotation right (°)</td>
<td>79.5 ± 10.50</td>
<td>79.7 ± 13.56</td>
<td>0.2 ± 14.00</td>
<td>0.94</td>
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</tr>
<tr>
<td>Lumbar flexion left (cm)</td>
<td>18.0 ± 4.08</td>
<td>17.8 ± 4.24</td>
<td>-0.1 ± 3.25</td>
<td>0.811</td>
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</tr>
<tr>
<td>Lumbar flexion right (cm)</td>
<td>17.8 ± 3.71</td>
<td>17.8 ± 4.14</td>
<td>0.0 ± 3.21</td>
<td>0.952</td>
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</tr>
<tr>
<td>Intermalleolar distance (cm)</td>
<td>116.8 ± 16.82</td>
<td>112.2 ± 15.76</td>
<td>-4.6 ± 12.00</td>
<td>0.058</td>
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<tr>
<td>Chest expansion (cm)</td>
<td>6.4 ± 1.73</td>
<td>4.6 ± 1.38</td>
<td>-1.8 ± 1.95</td>
<td>≤0.0001</td>
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</tbody>
</table>

**Group 2: no physiotherapy before lockdown (n=32)**

<table>
<thead>
<tr>
<th>BASMI</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>pre lockdown</td>
<td>post lockdown</td>
<td>difference</td>
<td>p</td>
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</tr>
<tr>
<td>Tragus-to-wall (cm)</td>
<td>11.2 ± 1.08</td>
<td>11.8 ± 1.23</td>
<td>0.7 ± 1.17</td>
<td>0.004</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Modified Shöber (cm)</td>
<td>13.8 ± 1.05</td>
<td>14.2 ± 1.09</td>
<td>0.3 ± 1.01</td>
<td>0.061</td>
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</tr>
<tr>
<td>Cervical rotation left (°)</td>
<td>78.6 ± 12.12</td>
<td>78.3 ± 13.02</td>
<td>-0.3 ± 10.77</td>
<td>0.895</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cervical rotation right (°)</td>
<td>78.4 ± 12.74</td>
<td>74.5 ± 19.61</td>
<td>-3.9 ± 21.28</td>
<td>0.315</td>
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</tr>
<tr>
<td>Lumbar flexion left (cm)</td>
<td>17.7 ± 5.28</td>
<td>17.8 ± 5.79</td>
<td>0.1 ± 2.54</td>
<td>0.89</td>
<td></td>
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</tr>
<tr>
<td>Lumbar flexion right (cm)</td>
<td>18.5 ± 4.49</td>
<td>20.3 ± 18.09</td>
<td>1.9 ± 16.74</td>
<td>0.533</td>
<td></td>
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</tr>
<tr>
<td>Intermalleolar distance (cm)</td>
<td>114.0 ± 14.83</td>
<td>105.6 ± 31.16</td>
<td>-8.4 ± 28.55</td>
<td>0.12</td>
<td></td>
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</tr>
<tr>
<td>Chest expansion (cm)</td>
<td>5.6 ± 1.82</td>
<td>4.2 ± 1.69</td>
<td>-1.4 ± 1.64</td>
<td>≤0.0001</td>
<td></td>
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</tbody>
</table>

BASMI and Chest Expansion values before and immediately after lockdown. The group was split based whether or not they had physical therapy before the lockdown. Paired T-tests were used for comparison and with Bonferroni correction the level of significance was α = 0.006.

In group 2, the Tragus-to Wall measurement displayed a small yet significant difference pre and post lockdown but for the overall analysis, we focused on the combined significant findings in both group 1 and 2.
Table 2: Patient demographics in the lockdown SpA cohort and the BeGiant control group

<table>
<thead>
<tr>
<th></th>
<th>BeGiant cohort (n=202)</th>
<th>Lockdown SpA cohort (n=65)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years, mean ± SD</td>
<td>39.8 ± 11.42</td>
<td>39.7 ± 11.78</td>
<td>0.958</td>
</tr>
<tr>
<td>Gender (M/F)</td>
<td>106/96</td>
<td>37/28</td>
<td></td>
</tr>
<tr>
<td>Body weight, kg, mean ± SD</td>
<td>75.1 ± 14.62</td>
<td>73.0 ± 13.26</td>
<td>0.317</td>
</tr>
<tr>
<td>Body height, cm, mean ± SD</td>
<td>173.0 ± 9.15</td>
<td>174.6 ± 8.88</td>
<td>0.256</td>
</tr>
<tr>
<td>BMI, kg/m², mean ± SD</td>
<td>25.1 ± 4.41</td>
<td>23.8 ± 3.46</td>
<td>0.044</td>
</tr>
<tr>
<td>Disease duration, years, mean ± SD</td>
<td>6.2 ± 5.26</td>
<td>6.1 ± 6.13</td>
<td>0.865</td>
</tr>
<tr>
<td>Symptom duration, years, mean ± SD</td>
<td>9.5 ± 8.24</td>
<td>10.7 ± 9.39</td>
<td>0.31</td>
</tr>
<tr>
<td>CRP, mg/L, mean ± SD</td>
<td>3.4 ± 3.96</td>
<td>3.1 ± 3.72</td>
<td>0.712</td>
</tr>
<tr>
<td>ESR, mm/h, mean ± SD</td>
<td>8.6 ± 8.06</td>
<td>8.5 ± 7.03</td>
<td>0.982</td>
</tr>
<tr>
<td>Tender/swollen joint count (%)</td>
<td>18.9 / 4.5</td>
<td>19.6 / 1.50</td>
<td></td>
</tr>
<tr>
<td>Current NSAID use index (%)</td>
<td>22.3 ± 36.4</td>
<td>36.7 ± 47.08</td>
<td></td>
</tr>
<tr>
<td>Current DMARD's use (%)</td>
<td>15.3</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Current biologicals use (%)</td>
<td>34.7</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>BASMI total</td>
<td>2.1 ± 0.88</td>
<td>1.9 ± 0.85</td>
<td>0.063</td>
</tr>
<tr>
<td>BASDAI total</td>
<td>3.3 ± 2.25</td>
<td>3.1 ± 1.95</td>
<td>0.543</td>
</tr>
<tr>
<td>BASFI total</td>
<td>2.1 ± 2.00</td>
<td>1.9 ± 1.83</td>
<td>0.41</td>
</tr>
<tr>
<td>ASDAS total</td>
<td>1.9 ± 0.92</td>
<td>2.0 ± 0.73</td>
<td>0.832</td>
</tr>
</tbody>
</table>

N=number of patients, SD= standard deviation, M= male, F= Female, BMI= body mass index, CRP= C-reactive protein, ESR= erythrocyte sedimentation rate
The online questionnaire: **INFLUENCE OF COVID-19 LOCKDOWN ON PHYSICAL CONDITION.**

1. Questions regarding physical therapy and exercise therapy

Before lockdown I received physical therapy: yes / no

<table>
<thead>
<tr>
<th>I received therapy</th>
<th>regularly / irregularly, based on existing complaints</th>
</tr>
</thead>
</table>

Treatment frequency

- 1x/month
- 2x/month
- 1x/week
- 2x/week
- 3x/week
- 5x/week

Which type of therapy did you receive? *(multiple answers possible)*

- massage therapy
- electrotherapy
- mobilization/ manipulation
- exercise therapy
- other: ………………………………………………………….

Before lockdown I exercised at home: yes / no

<table>
<thead>
<tr>
<th>I exercised</th>
<th>regularly / irregularly</th>
</tr>
</thead>
</table>

Frequency of exercises

- 1x/month
- 2x/month
- 1x/week
- 2x/week
- 3x/week
- 5x/week

I used an exercise program

- composed by myself
- composed by my physical therapist
- from an online platform

During lockdown

- I still visit my physical therapist
- I can’t visit my physical therapist anymore
- I receive digital guidance from my PT
- not applicable

Since

- …/…/…..

During lockdown, I now exercise at home by myself: yes / no

- I exercise at home by myself, like before
- I now exercise at home by myself
- I don’t exercise

During lockdown, I use an exercise program

- composed by myself
- composed by my physical therapist
- from an online platform
2. Questions regarding sports activities

Before lockdown I performed sports activities  yes / no

I performed my sports  □ alone
(multiple answers possible)  □ with friends
□ in a sportsclub
□ with a patient group

Which sport(s) did you practice?  

Minutes per practice  .................................................................
Times/month  .................................................................

During lockdown  □ I can still practice my sport
□ I can’t practice my sport anymore, but I perform a different sports activity
□ I don’t practice sports (anymore)
□ I started practicing sports

During lockdown, I now  □ walk
□ run
□ bike
□ other: .................................................................

Minutes per practice  .................................................................
Times/month  .................................................................

I use an activity monitor or a pedometer  yes / no

Are you willing to share the data from your activity monitor or pedometer?  yes / no

3. Work related questions

Before lockdown I performed a paid job  yes / no

My job consisted  □ mainly out of manual labor (> 60%)
□ mainly out of mental work (>60%)
□ a combination of manual and mental work

I worked  □ full-time
□ part-time because of my rheumatic disease
□ part-time because of other health condition
□ part-time because of other reasons

My job situation was  □ officer
□ worker
□ clerk
□ self employed
During lockdown
- I can keep working as usual
- I can work from home now
- I can’t work anymore
- not applicable

Now that I working at home
- I stand more than usual
- I sit more than usual
- I move around more than usual

Working at home
- I can do this as ergonomical as at the office (e.g. office chair and desk)
- I can do this less ergonomical than at the office (e.g. kitchen chair and table)

4. Questions regarding medication use

During the lockdown, I changed my medication use
- yes, because of the COVID-19 pandemic
- yes, but not linked to the COVID-19 pandemic
- not applicable

During lockdown my use of NSAID’s was
- unchanged
- increased
- diminished
- stopped
- not applicable

The NSAID’s I take are
- aceclofenac
- celecoxib
- diclofenac
- etoricoxib
- ibuprofen
- indomethacine
- meloxicam
- nabumetone
- naproxen
- piroxicam
- proglumethacine
- tenoxicam
- other: ……………………………………………………..

NSAID dosis
- <1day/week
- 1-3days/week
- 3-5days/week
- >5days/week
- daily
<table>
<thead>
<tr>
<th>Category</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily dose</td>
<td>mg</td>
</tr>
<tr>
<td>Start date</td>
<td></td>
</tr>
<tr>
<td>Stop date</td>
<td></td>
</tr>
<tr>
<td>During the lockdown my use of analgetics was</td>
<td>unchanged, increased, diminished, stopped, not applicable</td>
</tr>
<tr>
<td>The analgetics I take are</td>
<td>paracetamol, tramadol, other:</td>
</tr>
<tr>
<td>Analgetics dose</td>
<td>&lt;1 day/week, 1-3 days/week, 3-5 days/week, &gt;5 days/week, daily</td>
</tr>
<tr>
<td>Average daily dose</td>
<td>mg</td>
</tr>
<tr>
<td>Start date</td>
<td></td>
</tr>
<tr>
<td>Stop date</td>
<td></td>
</tr>
<tr>
<td>During the lockdown my use of corticoids was</td>
<td>unchanged, increased, diminished, stopped, not applicable</td>
</tr>
<tr>
<td>The glucocorticoids I take are</td>
<td>methylprednisolone, prednisolone, other:</td>
</tr>
<tr>
<td>Glucocorticoids dose</td>
<td>&lt;1 day/week, 1-3 days/week, 3-5 days/week, &gt;5 days/week, daily</td>
</tr>
<tr>
<td>Average daily dose</td>
<td>mg</td>
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<tr>
<td>Start date</td>
<td></td>
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<tr>
<td>Stop date</td>
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</tr>
<tr>
<td>During the lockdown my use of DMARD's was</td>
<td>unchanged, increased, diminished, stopped, not applicable</td>
</tr>
</tbody>
</table>
The DMARD’s I take are
- leflunomide
- methotrexate
- sulfasalazine
- other: .................................................................

DMARD’s dosis
- <1day/week
- 1-3days/week
- 3-5days/week
- >5days/week
- daily

daily or weekly dosis
........ mg/day or ........ mg/week

During the lockdown my use of biologicals was
- unchanged
- increased
- diminished
- stopped
- not applicable

The biologicals I take are
- adalimumab
- certolizumab-pegol
- etanercept
- golimumab
- infliximab
- secukinumab
- other: .................................................................

5. Questions regarding your health perception

How would you describe your current general health compared to before lockdown?
- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current morning stiffness compared to before lockdown?
- much better now
- a little better now
- about the same
- a little worse now
- much worse now

How would you describe your current joint stiffness and stiffness in the back now compared to before lockdown?
- much better now
- a little better now
- about the same
- a little worse now
- much worse now
How would you describe the hand-floor distance when you bend over with straight legs?
- □ much better now
- □ a little better now
- □ about the same
- □ a little worse now
- □ much worse now

How would you describe your current muscle strength compared to before lockdown?
- □ much better now
- □ a little better now
- □ about the same
- □ a little worse now
- □ much worse now

How would you describe your current general physical fitness compared to before lockdown?
- □ much better now
- □ a little better now
- □ about the same
- □ a little worse now
- □ much worse now

6. Questions regarding perceiving covid-19 symptoms

Do you suspect you had COVID-19 infection symptoms during lockdown?  yes / no

Which symptoms did you experience?
- □ fever
- □ shortness of breath
- □ dry cough
- □ pain in chest area
- □ muscle pain
- □ other: ..............................................................

Are you willing to visit the hospital after the lockdown for a short visit to evaluate the mobility of your joints and spine?  yes / no