1. Convergent validity: Bravais-Pearson correlation

\[ r_{T1} = 0.81 - 0.88, \ r^2 \geq 0.66, \ p < 0.001 \]

\[ r_{T2} = 0.85 - 0.90, \ r^2 \geq 0.72, \ p < 0.001 \]

\[ r_{T3 (total subgroup)} = 0.87 - 0.93, \ r^2 \geq 0.76, \ p < 0.001 \]

\[ r_{T3(d6-13)} = 0.85 - 0.92, \ r^2 \geq 0.72, \ p < 0.001 \]

2. Convergent validity: Partial correlation controlling for physical functioning (HAQ-DI)

\[ r_{T1} = 0.72 - 0.81, \ r^2 \geq 0.52, \ p < 0.001 \]

\[ r_{T2} = 0.77 - 0.83, \ r^2 \geq 0.59, \ p < 0.001 \]

\[ r_{T3 (total subgroup)} = 0.79 - 0.88, \ r^2 \geq 0.62, \ p < 0.001 \]

\[ r_{T3(d6-13)} = 0.75 - 0.88, \ r^2 \geq 0.56, \ p < 0.001 \]

3. Discriminant validity: Bravais-Pearson correlation of pain scales with age and disease duration (\( r \) in absolute values)

**Age:**

\[ |r_{T1}| = 0.01 - 0.05, \ r^2 < 0.01, \ p \geq 0.49 \]

\[ |r_{T2}| = 0.00 - 0.07, \ r^2 < 0.01, \ p \geq 0.37 \]

\[ |r_{T3 (total subgroup)}| = 0.07 - 0.08, \ r^2 < 0.01, \ p \geq 0.27 \]

\[ |r_{T3(d6-13)}| = 0.03 - 0.10, \ r^2 \leq 0.01, \ p \geq 0.35 \]

**Disease duration (years):**

\[ |r_{T1}| = 0.07 - 0.10, \ r^2 \leq 0.01, \ p \geq 0.16 \]

\[ |r_{T2}| = 0.10 - 0.11, \ r^2 \leq 0.01, \ p \geq 0.13 \]

\[ |r_{T3 (total subgroup)}| = 0.11 - 0.18, \ r^2 \leq 0.03, \ p \geq 0.02 \]

\[ |r_{T3(d6-13)}| = 0.09 - 0.18, \ r^2 \leq 0.03, \ p \geq 0.08 \]
4. Retest-reliability for patients maintaining antirheumatic therapy: Bravais-Pearson correlation

\[ r_{\text{VAS}} = 0.85 - 0.96, r^2 \geq 0.72, p < 0.001 \]
\[ r_{\text{NRS}} = 0.90 - 0.98, r^2 \geq 0.81, p < 0.001 \]
\[ r_{\text{VRS}} = 0.81 - 0.91, r^2 \geq 0.66, p < 0.001 \]

\[ r_{\text{VAS(d6-13)}} = 0.86, r^2 \geq 0.74, p < 0.001 \]
\[ r_{\text{NRS(d6-13)}} = 0.88 - 0.89, r^2 \geq 0.77, p < 0.001 \]
\[ r_{\text{VRS(d6-13)}} = 0.77 - 0.84, r^2 \geq 0.59, p < 0.001 \]

5. Retest-reliability for patients maintaining antirheumatic therapy: Partial correlation controlling for the physical functioning (HAQ-DI)

\[ r_{\text{VAS}} = 0.81 - 0.96, r^2 \geq 0.66, p < 0.001 \]
\[ r_{\text{NRS}} = 0.84 - 0.96, r^2 \geq 0.71, p < 0.001 \]
\[ r_{\text{VRS}} = 0.74 - 0.86, r^2 \geq 0.55, p < 0.001 \]

\[ r_{\text{VAS(d6-13)}} = 0.84, r^2 \geq 0.71, p < 0.001 \]
\[ r_{\text{NRS(d6-13)}} = 0.85 - 0.86, r^2 \geq 0.72, p < 0.001 \]
\[ r_{\text{VRS(d6-13)}} = 0.71 - 0.79, r^2 \geq 0.50, p < 0.001 \]

6. Responsiveness for patients with a change in antirheumatic therapy: Range of SRMs between T1 and T3 as well as between T2 and T3 (total subgroup)

\[ \text{SRM}_{\text{VAS}} = 0.11 - 0.18 \]
\[ \text{SRM}_{\text{NRS}} = 0.11 - 0.14 \]
\[ \text{SRM}_{\text{VRS}} = 0.13 - 0.16 \]
7. Responsiveness for patients with a change in antirheumatic therapy: Range of SRMs between T1 and T3 as well as between T2 and T3 (completion between days 6-13 after consultation)

\[
\text{SRM}_{\text{VAS}} = -0.11 \text{ - } -0.23 \\
\text{SRM}_{\text{NRS}} = 0.00 \text{ - } 0.07 \\
\text{SRM}_{\text{VRS}} = -0.08 \text{ - } 0.00 
\]

8. Changes in pain ratings: Dependent samples test (total subgroup); Wilcoxon signed-rank test for treatment change, dependent samples t-test for stable medication

<table>
<thead>
<tr>
<th>Treatment change:</th>
<th>Stable medication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>( Z_{\text{VAS(T1-T2)}} = -0.61, p = 0.553, r = -0.07 )</td>
<td>( t_{\text{VAS(T1-T2)}}(136) = 2.08, p = 0.040, r = 0.18 )</td>
</tr>
<tr>
<td>( Z_{\text{NRS(T1-T2)}} = -0.71, p = 0.727, r = -0.07 )</td>
<td>( t_{\text{NRS(T1-T2)}}(140) = 1.63, p = 0.105, r = 0.14 )</td>
</tr>
<tr>
<td>( Z_{\text{VRS(T1-T2)}} = 0.00, p = 1.000, r = 0.00 )</td>
<td>( t_{\text{VRS(T1-T2)}}(136) = 0.89, p = 0.373, r = 0.08 )</td>
</tr>
<tr>
<td>( Z_{\text{VAS(T1-T3)}} = -0.60, p = 0.560, r = 0.08 )</td>
<td>( t_{\text{VAS(T1-T3)}}(127) = 1.75, p = 0.083, r = 0.15 )</td>
</tr>
<tr>
<td>( Z_{\text{NRS(T1-T3)}} = -0.72, p = 0.483, r = 0.09 )</td>
<td>( t_{\text{NRS(T1-T3)}}(133) = 0.42, p = 0.675, r = 0.04 )</td>
</tr>
<tr>
<td>( Z_{\text{VRS(T1-T3)}} = -0.78, p = 0.613, r = 0.09 )</td>
<td>( t_{\text{VRS(T1-T3)}}(128) = 2.17, p = 0.032, r = 0.19 )</td>
</tr>
</tbody>
</table>

9. Changes in pain ratings: Dependent samples test (completion between days 6-13 after consultation); Wilcoxon signed-rank test for treatment change, dependent samples t-test for stable medication

<table>
<thead>
<tr>
<th>Treatment change:</th>
<th>Stable medication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>( Z_{\text{VAS(T1-T2)}} = -0.29, p = 0.793, r = -0.05 )</td>
<td>( t_{\text{VAS(T1-T2)}}(68) = 2.06, p = 0.043, r = 0.24 )</td>
</tr>
<tr>
<td>( Z_{\text{NRS(T1-T2)}} = -1.73, p = 0.250, r = -0.28 )</td>
<td>( t_{\text{NRS(T1-T2)}}(70) = -0.26, p = 0.798, r = -0.03 )</td>
</tr>
<tr>
<td>( Z_{\text{VRS(T1-T2)}} = 0.00, p = 1.000, r = 0.00 )</td>
<td>( t_{\text{VRS(T1-T2)}}(65) = 1.00, p = 0.321, r = 0.12 )</td>
</tr>
<tr>
<td>( Z_{\text{VAS(T1-T3)}} = -0.49, p = 0.651, r = -0.09 )</td>
<td>( t_{\text{VAS(T1-T3)}}(67) = 1.01, p = 0.316, r = 0.12 )</td>
</tr>
<tr>
<td>( Z_{\text{NRS(T1-T3)}} = 0.00, p = 1.000, r = 0.00 )</td>
<td>( t_{\text{NRS(T1-T3)}}(70) = -1.10, p = 0.275, r = 0.13 )</td>
</tr>
</tbody>
</table>
$Z_{VRS(T1-T3)} = -0.33, \ p = 1.000, \ r = -0.06 \quad t_{VRS(T1-T3)(67)} = 2.31, \ p = 0.024, \ r = 0.27$