Supplementary Table S1. Among sCD25, anti-CCP, RF and CRP, only sCD25 is significantly associated with RA-ILD after the multivariate analysis.

<table>
<thead>
<tr>
<th>Index</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>p-value</th>
<th>OR</th>
<th>95%CL</th>
</tr>
</thead>
<tbody>
<tr>
<td>sCD25</td>
<td>0.003</td>
<td>0.001</td>
<td>11.809</td>
<td>0.001</td>
<td>1.003</td>
<td>1.001-1.004</td>
</tr>
<tr>
<td>CRP</td>
<td>0.001</td>
<td>0.006</td>
<td>1.926</td>
<td>0.165</td>
<td>1.001</td>
<td>0.990-1.013</td>
</tr>
<tr>
<td>RF</td>
<td>0.000</td>
<td>0.000</td>
<td>0.054</td>
<td>0.816</td>
<td>1.000</td>
<td>1.000-1.001</td>
</tr>
<tr>
<td>CCP</td>
<td>0.001</td>
<td>0.003</td>
<td>0.078</td>
<td>0.781</td>
<td>1.001</td>
<td>0.996-1.006</td>
</tr>
<tr>
<td>constant</td>
<td>-3.362</td>
<td>0.609</td>
<td>30.301</td>
<td>0.000</td>
<td>0.035</td>
<td></td>
</tr>
</tbody>
</table>

Supplementary Table S2. The clinical and laboratory manifestations of RA-ILD patients with sCD25-positive and negative.

<table>
<thead>
<tr>
<th>Index</th>
<th>sCD25 (+) (n=32)</th>
<th>sCD25 (-) (n=9)</th>
<th>p-value in Chi-square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>23 (74.2)</td>
<td>8 (25.8)</td>
<td>0.294</td>
</tr>
<tr>
<td>Age (&gt;60 years)</td>
<td>21 (84.0)</td>
<td>4 (16.0)</td>
<td>0.250</td>
</tr>
<tr>
<td>Rheumatoid nodules</td>
<td>7 (100.0)</td>
<td>0 (0)</td>
<td>0.123</td>
</tr>
<tr>
<td>Haematological involvements</td>
<td>10 (66.7)</td>
<td>5 (33.3)</td>
<td>0.181</td>
</tr>
<tr>
<td>Metabolic disorders</td>
<td>19 (73.1)</td>
<td>7 (26.9)</td>
<td>0.311</td>
</tr>
<tr>
<td>DAS28 scores DAS28 &gt; 5.1</td>
<td>14 (73.7)</td>
<td>5 (26.3)</td>
<td>0.530</td>
</tr>
<tr>
<td>DAS28 ≤2.6</td>
<td>30 (81.1)</td>
<td>7 (18.9)</td>
<td>0.154</td>
</tr>
<tr>
<td>ESR (+)</td>
<td>24 (80.0)</td>
<td>6 (20.0)</td>
<td>0.618</td>
</tr>
<tr>
<td>CRP (+)</td>
<td>20 (90.9)</td>
<td>2 (9.1)</td>
<td>0.032</td>
</tr>
<tr>
<td>RF (+)</td>
<td>31 (77.5)</td>
<td>9 (22.5)</td>
<td>0.591</td>
</tr>
<tr>
<td>Anti-CCP (+)</td>
<td>30 (76.9)</td>
<td>9 (23.1)</td>
<td>0.442</td>
</tr>
<tr>
<td>HRF-IgG (+)</td>
<td>7 (100.0)</td>
<td>0 (0)</td>
<td>0.123</td>
</tr>
<tr>
<td>HRCT patterns</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UIP (+)</td>
<td>24 (100.0)</td>
<td>0 (0)</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>NSIP (+)</td>
<td>8 (88.9)</td>
<td>1 (11.1)</td>
<td>0.374</td>
</tr>
<tr>
<td>RA-ILA (+)</td>
<td>0 (0)</td>
<td>8 (100.0)</td>
<td><strong>0.000</strong></td>
</tr>
</tbody>
</table>

The numbers (n) indicated the number of patients with the specific characteristics among RA patients with elevated sCD25 levels or normal sCD25 levels, and the following percentages (%) indicated the percentages of patients with the specific characteristics among RA patients with elevated sCD25 levels or normal sCD25 levels. HRF-IgG: hidden rheumatoid factor-IgG.

Supplementary Fig. S1. Serum sCD25 level in RA-ILD with different HRCT patterns.
A: consolidation; B: ground glass attenuation; C: traction bronchiectasis; D: Irregular line pattern; E: thickening of the bronchial bundles; F: honeycomb shadow.