Review of: "Comparing Visual and Software-Based Quantitative Assessment Scores of Lung Parenchymal Involvement Quantification in COVID-19 Patients"

Bela Balint

Potential competing interests: No potential competing interests to declare.

The authors of this study focused on evaluating the differences between a visual quantitative method and software assessment of two different software packages (Icometrix, Belgium, and Philips, The Netherlands) in order to more precisely determine the involvement of lung parenchyma (as a quantification approach) in affected/damaged parts due to infection by SARS-CoV-2. The main goal was to determine the differences (on the basis of sensitivity/specificity, determination of key parameters, etc.) between these methods and to assess their reliability.

The methodology and terms of the examination (including a limited number of subjects - precisely, "Ninety patients were included with the following criteria: patients' age more than 18 years old, RT-PCR test positive for COVID-19, and an unenhanced chest CT scan obtained between March and June 2021") were not at the required level for the processing and interpretation of the obtained results, which is why the conclusions cannot be convincing and entirely credible.

At the beginning of the pandemic and/or in its early stages/periods, the results of each, accordingly also of this comparative research, could probably provide useful guidelines - which lose their importance over time due to inevitable selection.

Based on the above-stated points, unfortunately, I could not recommend the publication of this work in its current form. I suggest further investigations and a better presentation, as well as interpretation, of the obtained results.