Reviewer’s report

Title: Comparison of disease progression subgroups in idiopathic pulmonary fibrosis

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Reviewer: Silvia Terraneo

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Comparison of disease progression subgroups in idiopathic pulmonary fibrosis

Summary of the study

Kärkkäinen M and colleagues performed a retrospective study in order to evaluate clinical characteristics of patients with idiopathic pulmonary fibrosis with different survival. Functional and radiologic characteristics are also evaluated with CPI and GAP scores and by the analysis of PFT. Predictors of mortality are also evaluated.

The retrospective analysis of 132 patients involved in the study pointed out that the factor that better distinguish rapidly progressive disease from other patients is DLCO decline in 12 months with an accuracy of 84% and all clinical and radiological variables have an accuracy lower than 75%.

To the authors

I think that the study aims are interesting and I would like to read data about this field. However the review of the manuscript revealed some aspects that call for revision:

Major

The most important concern about this work is how you communicated the aim of the study. At the end of background section you reported the aim of the study. I suggest to better clarify it. It is too long and difficult to follow. Furthermore it results different from the aim you reported in the abstract.

The sentence "The aims of this study were to re-evaluate a retrospective cohort of patients with IPF from Kuopio University Hospital (KUH), a tertiary hospital in eastern Finland, using the international guidelines and to study retrospectively the clinical factors and comorbidities that could distinguish between patients categorized into subgroups according to their observed lifespan i.e. different courses of disease" is really too long and need a simplification to be more concise and informative about your aims. Is it a aim of your study to re-evaluate the IPF case??
You wrote about the assessing of "functionality" of scores. Could you better explain it? In the abstract is reported the applicability of the score… could you please explain? The results section need to be re organized consequently.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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