Reviewer’s report

Title: Analytical performance of Envisia: a genomic classifier for Usual Interstitial Pneumonia

Version: 0 Date: 21 Mar 2017

Reviewer: Marco Chilosi

Reviewer’s report:

The Authors describe in detail a number of relevant issues concerning the Envisia test genomic classifier for ILD. The study is relevant, technically sound and well performed.

Nevertheless, the utility and realistic applicability of this intriguing (but complex and expensive) diagnostic procedure is so far still questionable. The quoted references are in fact either preliminary (ref 11) or not published (ref. 9). In particular, it is not clear how the molecular approach can decrease the need of surgical biopsies. In fact, the diagnostic yield of TBB in UIP differential diagnosis has been demonstrated by several studies to be low. In only two studies a proportion of cases of UIP could be consistently diagnosed. It is possible to argue that the same proportion of samples harboring UIP morphological features will demonstrate a UIP molecular profile. It is difficult to accept that non-diagnostic TBB samples (normal parenchyma, bronchial wall tissue, etc.) may provide a UIP molecular profile, thus invalidating also the molecular results.

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.

Yes

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

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