

## Peer Review File

Article information: <http://dx.doi.org/10.21037/jtd-20-2990>.

**Reviewer A:** The authors describe the results of a survey grading the factors that affect the quality and accuracy of diagnostic bronchoscopy procedures when establishing a new Interventional Pulmonology program. They review their survey data and relate it to a second survey round after reviewing real world data from establishing their program. The data is intriguing as it is novel and generates multiple topics for further research. Some additional information would strengthen the paper.

1) 2nd survey - please provide more detail on how the first and second surveys differed and in what meaningful ways after the real world data was reviewed by participants.

- We are very grateful to Reviewer A for the time that s/he dedicated, despite the current pandemic emergency, to help us improve the quality of the manuscript.

We modified the text according to the very useful suggestions that Reviewer A offered.

About comment n. 1, we wish to provide the following supporting clarifications:

the survey we used in the second round was the same as the one we used in the first round.

We adopted the Delphi approach for two main reasons: first, we believe that a survey is substantially a summary of the current shared opinion on a specific matter. In our case, it included the factors that are more commonly considered as having a role in the setting up of a IP Unit; also, the participating experts derived their opinions from their clinical practice in their specific clinical settings. The second reason is that the participants in the survey may adjust their previous responses after reviewing the real world data coming from a clinical setting where some operational conditions were not available.

Consistently with the common trend in the Delphi approach, we observed some changes in the opinions of the experts in the second round.

In the revised version of the manuscript, we describe in detail the change in the value of importance given to each of the factors included in the survey (see paragraph: Changes in the text).

2) Tables - please provide only 2 decimal points for values. Please provide foot notes for the abbreviations. Please describe what is meant by others.

- The Tables have been modified according to your much appreciated considerations.

3) Significant editing for grammar and syntax is also required.

- Thank you very much for this comment. We have performed a complete revision of the text in order to avoid (to the best of our abilities) grammar and syntax mistakes.

Changes in the text: on page 7, we added “After having been shown the results of the first two years of activity of our Unit, the respondents were given the possibility to revise their previous responses. The result of this second round was that only some factors were indicated as capable of positively influence the performance of a newly established Interventional Pulmonology Unit.

The importance of the operator’s expertise passed from a score of 6.36 to a score of 6.90; that of the “Personal experience in reading cytological samples” passed from 6.20 to 7, and that of the “Availability of linear and radial EBUS” passed from 6.64 to 7. All the other factors indicated in the survey received lower scores. In particular, the “Availability of a discussion in the Lung Unit” of the cases dropped from 6.16 to 3.20; the “Availability of dedicated nursing assistance”, from 6.43 to 3.20; the “Availability of a ROSE”, from 5.80 to 2.80; the “Personal experience in reading surgical samples”, from 5.04 to 2.80. Even the value of factors related to anesthesiology assistance fell to 3.80, in the grey area, which suggests that these factors do not represent a nonnegotiable condition for obtaining the best chances of success in the establishment of a new Interventional Pulmonology Unit”.

see Page 7, line 4-16

**Reviewer B:** This survey-based study evaluated the factors related to tissue sampling and diagnostic accuracy in Italy's new interventional pulmonology (IP) unit. The authors collected the survey from 56 out of 158 IP units about 24 questions.

As the authors mentioned, this survey's results might be important for domestic medical centers that consider the newly established IP units. Unfortunately, the authors decided on the specific 24 questions essential for the IP unit and collected the experts' opinions; however, they could not evaluate how their ideas play for the IP unit. Hence, the manuscript became just the report from experts in Italy without any scientific support.

This study's main aim was to evaluate the factors that affect tissue sampling and diagnostic yield, but the authors did not consider its correlations. The critical issue of this manuscript was the lack of evidence to lead to their conclusions.

- We are very grateful to Reviewer B for the time that, despite the current pandemic emergency, s/he dedicated to help us improve the quality of the manuscript.

We modified the text according to the very useful suggestions that Reviewer A offered and would like to provide some clarifications below:

We confirm that, as Reviewer B states, this is a survey-based study evaluating the factors related to tissue sampling and diagnostic accuracy in Italy's new interventional pulmonology (IP) unit.

Our aim was just to report the opinions of Italian expert IPs in this field on the factors that are potentially able to impact on the overall results of a new IP unit.

We totally understand and agree with Reviewer B about the fact that this study is not supported by scientific evidence, due to methodological inadequacy.

We apologize for having not made it clear in the first version of the manuscript.

When planning this study, we started from an assumption that is the rationale of the overall project: the factors impacting on the overall diagnostic yield of diagnostic bronchoscopic procedures of a newly established Interventional Pulmonology Unit (in a geographic area where such practices had never been performed) have not been explored so far.

To investigate this issue, an ideal study design should consist of a retrospective comparative analysis between different “newborn” IP units or, even better, a prospective study in which each single variable is tested or which evaluates the impact on the overall result.

However, the feasibility for this type of study would be clearly scarce.

Therefore, as it would have been hard to collect evidence on this matter, we planned a programme to obtain a consensus of opinion of IP experts in order to offer the Readers an authoritative point of view on this challenging topic. We believe that the Delphi approach is the best method to obtain the most reliable experts' opinion through consensus. This method is generally based on the use of a series of questionnaires interspersed with controlled opinion feedback. In this case, we used the same survey during the first and the second round, and between the two rounds we presented the participants real world data coming from our new IP Unit, located in an area where some of the factors included in the survey have never been available.

Thus we are completely aware of the limitations of our study design, and we have modified the text in order to clarify our final aim ("to report the opinions of expert"), limiting the conclusions of our study to simple general considerations on the topic.

Changes to the text: we modified the Conclusions by deleting the expression "main end point" and replacing it with "purpose" on page 8; on page 8 we added "As little literature evidence was available in this matter, we used the Delphi method to obtain the most reliable consensus of opinion by surveying a group of Italian IP experts. The participants were sent out a questionnaire in two rounds, interspersed with controlled opinion feedback, which in this case was represented by the presentation of real-life data"; on page 10 and 11, we modified Conclusions as follows "A consensus of opinion of a group of expert interventional pulmonologists highlighted the factors that may be responsible for the diagnostic success of a newly established Italian IP Unit. These factors are mainly three: personal skills of the interventional pulmonologist, the availability of echoendoscopic technology, and the expertise in reading cytological samples. All of the other factors included in the survey, such as dedicated nursing assistance, the availability of a rapid on-site evaluation, and the presence of anesthesiology assistance, resulted to be almost uninfluential.

Although the results of this opinion-based study should be validated by evidence-based medicine to gain scientific validity, its ultimate objective was to pave the way for further research in a field which has never been explored so far and that may shed light on possible useful implications, such as a better allocation of economical and human resources when the factors responsible for the operational success of a new IP Unit are well defined".

We thank the Reviewers once again for their precious help in improving the quality of the manuscript, and we hope that this revised version will be of more interest for the Readers of your prestigious Journal.

We guarantee that this manuscript was neither published or considered for publication elsewhere.