

## Peer Review File

Article information: <https://dx.doi.org/10.21037/amj-23-106>

### Reviewer A

Comment 1: to my understanding, this is a complete summary of all potential complications and side effects of EBV placement. It is well written and nice to read. I would suggest to add another comment, how to deal with fungal infections of the valves also mentioning the rare cases of lobar abscess or cavitation formation.

Reply 1: Thank you reviewer A. We certainly have tried to summarize all of the potential complications and side effects of EBV placement, and have tried to include at least short discussion points in each paragraph. Your idea about including a section on fungal infections and abscess and cavitation is excellent. After a thorough literature review, there is not much published data regarding these phenomenon in particular outside of case reports. A short section has been included addressing these sorts of infections (like candida fungal infections in colonized patients) after the paragraph discussion adhesions (see added citation 17).

### Reviewer B

Comment 2: Please include data about smoke exposure, such as pack-years the main limiting factor for success of the technique is homogeneous emphysema and the degree of air trapping, please discuss it how were determined the air trapping functional values? by spirometry or plethysmography. Was it a cohort study or a case-control study? What level were the exacerbations? please include the following references for discussion  
-ERJ Open Res. 2023 Jul 17;9(4):00155-2023.  
-Int J Chron Obstruct Pulmon Dis. 2020 Oct 21;15:2583-2589.

Reply 2: Thank you to reviewer B for the comments. The idea to include a discussion regarding outcome success differing between homogenous and heterogeneous diseased lobes is an excellent one. A relatively lengthy section has been added discussing this point specifically. We have added a discussion regarding the variable outcomes in four large trials that used Chartis to aid patient selection. We then included a discussion about air trapping and perfusion and how all of these factors can contribute to a poor outcome. The different ways (plethysmography vs spirometry) and how these methods can provide different results and how this may have impacted the outcome data despite the recommendations aided by Chartis has been included as well. The recommended references have been included in the paper (citations 20 and 21). In keeping with the rest of the flow of the paper, we hope we have addressed the points you have brought up adequately.

### Reviewer C

Comment 3: The most embarrassing complication following BLVR is ineffective result. There may be a separate review for patient selection of BLVR, this review should include unexpected negative effect after the procedure, which may be resulted from collateral ventilation, mucus impaction, bronchial hyperresponsiveness after the valve insertion

Reply 3: We could not agree more with this sentiment and we thank you for bringing this up. This comment incorporates some of the recommendations from reviewer 2 as well, regarding discrepancy in outcomes due to less than ideal patient selection in some cases. Two paragraphs have been included just before the conclusion in an effort to highlight this point adequately, with regards to homogenous vs heterogonous disease, perfusion, air trapping, and how the methods by which air trapping is assessed can largely play a role and alter the likelihood of a successful outcome. A sentence has also been included in the conclusion emphasizing this point.