#### Reviewer 1 v.1

## Comments to the Author

## General comments

Overall well written and interesting! The authors presented a role of CTEPH team in charge of making a decision for PEA in BPA era. They revealed a relatively low rate of PEA compared to the previous studies and better survival rate in BPA groups than PEA and MT groups. The study which directly compared survival rate after BPA or PEA is still rare and worth to be published. I have the following minor concerns.

# Specific comments

### Patients and methods

#1; The criteria of operability should be an important issue for CTEPH team. From the current manuscript, the readers cannot understand how the CTEPH team judge surgical accessibility. Could the author add more detailed description for judging clot accessibility?

# In Figure1

#2 ; The 6 patients were listed as re-evaluation in figure1. The description of these 6 patients were not found in the manuscript. Could the author explain why these 6 patients were reevaluated?

# Results

- #3 ; In Page8 Line59: The authors showed 46 patients who were judged as inoperable due to high risk comorbidities. This reviewer strongly recommends the authors to disclose the contents of these comorbidities because they should work as a selection-bias which will affect the survival rate of operated and non-operated group. In fact, high-risk patients with comorbidities were excluded from only PEA groups whereas they were included in non-PEA groups.
- #4; In Page9 Line40: The authors described 18 patients who were once judged as operable but didn't underwent PEA. Could the author disclose how many patients among these 18 patients actually refused PEA?
- #5; In Page9 Line51: Could the author describe how CTEPH team allocated the 127 patients to BPA or MT group? Is there any specific strategy to BPA or MT? From the current manuscript, the process of decision making for BPA or MT by CTEPH team was unclear. If there is no strategy to select BPA candidates by CTEPH team, please describe so.

#6 : In Page9 Line53 : In BPA groups, how many sessions of BPA were performed until the followup. Because a recent study\* showed extensive revascularization by BPA provided better outcome, the information of session number should be important.

\* Shinkura Y et al. Extensive revascularisation by balloon pulmonary angioplasty for chronic thromboembolic pulmonary hypertension beyond haemodynamic normalisation. EuroIntervention 2018:13:2060-2068.doi: 10.4244/EIJ-D-17-00157.