

Author response v.1

Reviewer #1:

This is a nicely written crisp review article on autophagy in relation to different lung diseases. The authors attempt to include every bit of information. My comments below are general in nature that point towards improvements needed to increase the quality of this review article:

Comment 1: Although the figures 1 and 2 are helpful for a layman, in addition to these, at the very least, the authors need to provide schematic diagrams for every subtopic that they have discussed: 4.2-4.6. It is incomprehensible that the authors have gotten away with just two figures that are very basic in nature. Furthermore please refer appropriate figures in the text. For example Figure 1 is not indicated in the text.

Response: We thank the reviewer for this valuable suggestion. We have provided schematic diagrams for every subtopic that we have discussed. (Figure 2-7) Each Figure is indicated in the text.

Comment 2: In line with point 1, description of detailed mechanisms where possible need to be given. There is a whole lot of information on the signaling mechanisms of autophagy in the literature that would relate to different lung diseases. In most cases, the authors have only mentioned the cause and effects of autophagy, however description of detailed mechanisms are lacking at several places.

Response: We thank the reviewer for this valuable suggestion, we have provided detailed signaling mechanisms of autophagy in the text that relate to different lung diseases and shown them in schematic diagrams.

Comment 3: It will be helpful to indicate complete forms of abbreviated terms such as for example iASPP; Atg; SQSTM1 etc

Response: Thanks for your advice. I have made corresponding corrections according to your helpful advice. The complete forms of abbreviated terms are highlighted in yellow.

Comment 4: I would recommend having this article checked for proper English verbiage and several places.

Response: We thank the reviewer for this valuable suggestion. We have asked a professional editing company to improve the language of the manuscript.

Reviewer #2:

This is a well written and comprehensive review of Autophagy and pulmonary disease. This is an important and evolving concept in pulmonary disease. However, this review overlaps with previous reviews on pulmonary disease. Authors should refer to more recent work and develop a new point of view. For instance, authors need to expand the idea of autosis further and explain its relationship with COPD in terms of pathophysiology and therapeutic possibility. Furthermore, figures or tables are needed to lead the reader to understand. Some points the authors should consider:

Response: We appreciate your comments very much. First, We have added 10 new papers published within the past 5 years, and the references are highlighted in green. Second, We have expand the idea of autosis further and explain its relationship with COPD in terms of pathophysiology. Third, We have provided detailed figures of autophagy related to different lung diseases so that readers can better understand the association between autophagy and lung diseases. (Figure 2-7)

Comment 1: The quality of English is not up to standard in large sections of the review. The authors should consider having the review checked for sentence structure, grammar and appropriate use of terminology.

Response: We thank the reviewer for this valuable suggestion. We have asked a professional editing company to improve the language of the manuscript.

Comment 2: The "cigarette smoke(CS)" may be changed into "CSE(cigarette smoke extract)"

Response: We thank the reviewer for pointing out this issue, which we have corrected (line104; line112; line114; line 129-135; line141).

Comment 3: 4.1 Wu Yet al. found that the levels of autophagy (LC3II/I and beclin 1 levels) in PBMCs in COPD patients were increased and the extent of PBMC autophagy was negatively correlated with FEV1% predicted. FEV1% should be FEV1/FVC?

Response: We thank the reviewer for pointing out this issue, I read the cited literature carefully again and confirm that the results showed that the extent of PBMC autophagy was negatively correlated with FEV1% predicted. FEV1/FVC less than 0.7 is the diagnostic criteria for COPD, and the predicted FEV1% is an indicator of the severity of COPD.