

## Answering Reviewers

### Reviewer 1

**Comment:** Chronic obstructive pulmonary disease is often complicated by a collection of underlying diseases. The neutrophil CD64 index can act as an early diagnostic marker for infection. Multiple reports correlated the CD64 index with the severity of chronic obstructive pulmonary disease and bacterial infections. Activin A is a member of the transforming growth factor beta superfamily and participates in the regulation of proliferation, chemotaxis, and apoptosis of neutrophils, macrophages, fibroblasts and other cells. There are few reports on the effects of pulmonary infections on the CD64 index and activin A in patients with chronic obstructive pulmonary disease, and the mechanism remains unclear. In this study, the authors analyzed the bacterial spectrum and expressions of the CD64 index and activin A in patients with chronic obstructive pulmonary disease, complicated with pulmonary infection, and discussed relevant mechanisms. This study is very well designed, the methods are clearly described. The results are very interesting. The reviewer suggests to accept this manuscript after a minor editing. The authors should check the language of the manuscript, and the references should be edited and updated.

**Reply:** *Thanks for your positive comments. We have checked and edited the manuscript throughout again. Also, we updated the references, and add the PMID and DOI numbers according to the Guidelines and Requirements for Manuscript Revision.*

### Reviewer 2

**Comment:** This is an interesting study about the bacterial spectrum, activin A, and CD64 index in COPD patients. A total of 96 COPD patients, without pulmonary infection were enrolled in this study. The inclusion and exclusion criteria are reasonable and described in detail. The results are very interesting, and well discussed. I have no specific comments to the authors.

**Reply:** *Thanks for your positive feedback.*