Reviewer 1 v.1

Comments to Author:

Authors have performed a systematic review and meta-analysis for correlation between TNF-alpha and COPD

- 1. Please mention how was COPD diagnosed in all the studies that were reviewed. How many used post BD spirometry and how many did not use bronchodilator reversibility testing
- 2. Please mention in how many of the studies included in the study, COPD patients were treated with a. inhaled steroids. b. oral steroids
- 3. Please present the PICOS as a table
- 4. Please mention where the protocol for systematic review and meta-analysis was registered in Prospero or others
- 5. How much of homogeneity observed is due to different kits used for estimating TNF-alpha. There is a huge variation in the levels observed among COPD patients and controls. How were these adjusted for
- 6. With so much of heterogeneity can a meta-analysis be done or should the review be limited to only systematic review. Please justify
- 7. Please enumerate as a table the characteristics of excluded studies and the reasons for the exclusion
- 8. Were there no studies before the year 2000? All the included studies are after 2000
- 9. Please mention how was the risk of bias evaluated in each of the studies included
- 10. How was bias in studies handled in the final analysis?
- 11. Spelling and grammatical errors need to be corrected throughout the manuscript
- 12. In discussion (page 7), authors have described COPD as having reversible but progressive airflow obstruction. The airflow obstruction in COPD is partially reversible at best and is mostly irreversible
- 13. Please mention all the reasons for exclusion of studies in more detail
- 14. Introduction page 3, please use more recent references from the global burden of disease series from the lancet series for the burden of COPD in the world.
- 15. Please discuss reasons for the variations in levels of TNF-alpha in COPD from 1 to 205 in various studies (Figure 2)

- 16. Please explain in detail how the weightage was given for various studies in the analysis. Similar weightage seems to be given to studies with very large number of subjects and very small number of subjects.
- 17. Please mention in more detail the strengths and limitations of this study and future directions.