# For research article

# Response to Reviewer 1 Comments

**1. Summary**

Thank you very much for taking the time to review this manuscript. Please find the detailed responses below and the corresponding revisions/corrections highlighted/in track changes in the re-submitted files.

**2. Point-by-point response to Comments and Suggestions for Authors**

**Comments 1:** The author should give the diet composition fed to the chickens during the experimental and post-experimental periods (different time points) for a better understanding of the work and repeatability/reproducibility of the work.

**Response 1**: We are really appreciate for your time and helping us to improve the paper. We totally agree with this comment. Therefore, we added the ingredient of our feed in line no 82-89.

Line no 82-89 "[From 1-day-old to 30-day-old, chicks were feed with food 531N with the following nutrition composition: crude protein ≥ 20.0%, crude fiber ≤ 6.0%, crude ash ≤ 8.0%, calcium range from 0.60% ~ 1.80%, phosphate ≥ 0.40%, sodium chloride ranged from 0.20% ~ 0.80%, lysine ≥ 1.00%. From 31-day-old to 120-day-old, chicken were feed with food 532N with the following nutrition composition: crude protein ≥ 16.0%, crude fiber ≤ 7.0%, crude ash ≤ 8.0%, calcium range from 0.60% ~ 1.30%, phosphate ≥ 0.40%, sodium chloride ranged from 0.20% ~ 0.80%, lysine ≥ 0.80%.]"

**Comments 2:** The author needs to justify why 0.75g/L tilmicosin is added to drinking water. Why not a lower or higher level? Maybe use past articles to support this.

**Response 2:** Thank you for highlighting this point. We fully concur with your observation. Our selection of a dosage of 0.75 g/L of tilmicosin is based on the recommendations provided by the manufacturer. Our objective is to evaluate the effects of tilmicosin on a daily basis for farmers. Furthermore, this dosage is also consistent with the guidelines outlined in "The Veterinary Pharmacopoeia of the People's Republic of China".

**Comments 3:** The discussion requires a more thorough review of relevant research with a stronger focus on linking the different results for a better understanding of TIM residues and their effects on chickens. Several arguments presented lack sufficient depth to support this study's results adequately.

**Response 3:** Thank you for pointing this out. We totally agree with this comment. Therefore, we added more content in the discussion part. The discussion section is expanded from 319-373 to 322-408, from 55 lines to 86 lines. We also added more relevant researches to support our content.

**Comments 4:** L81, is there any reason for using "female" silkie chicken?

**Response 4:** Thank you for pointing this out. The reason we choose female silkie chicken due to the consumer's preference and potential sex difference on microbiota of silkie chicken. In the south part of China, consumers only interested in female chicken due to theri meat and favor. Therefore, our priority is to reveal tilmicosin's effect on female chicken and improve production. However, thank you for raising this point, we would like to conduct research on male chicken in the future.

**Comments 5:** L85, what is the meaning of "CA"?

**Response 5:** Thank you for pointing this out. We totally agree with this comment. "CA concentration" was a typo, we corrected it as "Concentration"
Line no: 91-93- "Concentration of 0.75g/L tilmicosin was administrated to the treatment group through drinking water at the beginning of the experiment and for the consecutive of three days."

**Comments 6:** L87, can you correct "10ten"
L439, can you correct "6six"

**Response 6:** Thank you for pointing this out. We totally agree with this comment. Therefore, we changed these all into number form.
Line no: 94- " 10 chickens from the treatment group and 6 chickens from the control group"