

## REVIEWER'S REPORT

Manuscript No.: IJAR-53915

Date: 20-09-2025

**Title: Survival and Pulmonary Toxicity in Non-Small Cell Lung Cancer : The Role of Pre-Treatment GTV Volume and Dosimetric parameters**

### Recommendation:

Accept as it is .....

**Accept after minor revision.....**

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality	✓			
Techn. Quality	✓			
Clarity		✓		
Significance	✓			

Reviewer Name: Dr.Aamina.

### Reviewer's Comment for Publication.

#### Strengths

- Focus on clinically relevant endpoints: overall survival and acute pulmonary toxicity.
- Well-structured study with clearly defined patient inclusion and exclusion criteria.
- Comprehensive dosimetric analysis, including MLD, V20Gy, and V30Gy.
- Clear association between dosimetric parameters and pulmonary toxicity, which supports individualized radiotherapy planning.
- Results are presented logically, and the study's findings have practical implications for radiation oncologists.

#### Suggestions for Minor Revision

1. **Clarity and Conciseness** – Streamline the introduction to reduce repetitive discussion of tumor volume and radiotherapy principles.
2. **Statistical Reporting** – Include confidence intervals and hazard ratios for survival analyses. Kaplan-Meier survival curves and tables of toxicity grades would strengthen visualization.

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3. **Discussion Section** – Expand the discussion to compare your findings with recent studies, particularly regarding thresholds of GTV and dosimetric parameters predictive of pulmonary toxicity.
4. **Limitations** – Clearly discuss the small sample size, retrospective design, and potential selection bias. Consider suggesting multicentric validation in future studies.
5. **Figures and Tables** – Ensure that all figures, such as dose-volume histograms or survival curves, are clear, labeled, and referenced appropriately.
6. **References** – Update to include recent literature on NSCLC radiotherapy, GTV prognostic relevance, and pulmonary toxicity predictors.

### **Conclusion**

This manuscript provides valuable insights into the prognostic role of pre-treatment GTV volume and dosimetric parameters in NSCLC patients treated with 3D-CRT. With minor revisions to improve clarity, statistical detail, and discussion, the study will make a meaningful contribution to radiation oncology literature.