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Reply to Chowdhary et al --Manuscript Draft--

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We would like to thank Chowdhary et al. for their constructive comments¹ regarding our recent publication describing mortality rates in a cohort of COVID-19 patients with a history of radiotherapy². We wholeheartedly agree that additional potential risk factors, including comorbid medical conditions³, should be included in future analyses on this topic. We are currently sharing patient data with large national and international consortia^{4,5} to enable more definitive analyses.

To try to address other concerns about our analysis, we now present updated data. Additional deaths have unfortunately occurred in our cohort of 107 patients, including deaths more than 14 days after COVID-19 diagnosis. The actuarial 14-day survival rate is now 75%, and the 45-day survival rate is now 61%. Figure 1 depicts the relationship between primary cancer type, mean lung radiotherapy dose, and vital status in our dataset. Figure 2 contains updated Kaplan-Meier survival curves.

We invite readers to make their own interpretations of our data. We find it plausible that patients with a history of significant lung irradiation may be at increased risk for complications when faced with a serious viral pneumonia. Until more conclusive data are available, we hope that all patients with thoracic cancers/tumors receive appropriate guidance and social support to minimize their risk of contracting COVID-19.

Figure 1: Scatter plot depicting primary cancer diagnosis, mean lung radiotherapy dose, and vital status for patients who contracted COVID-19.

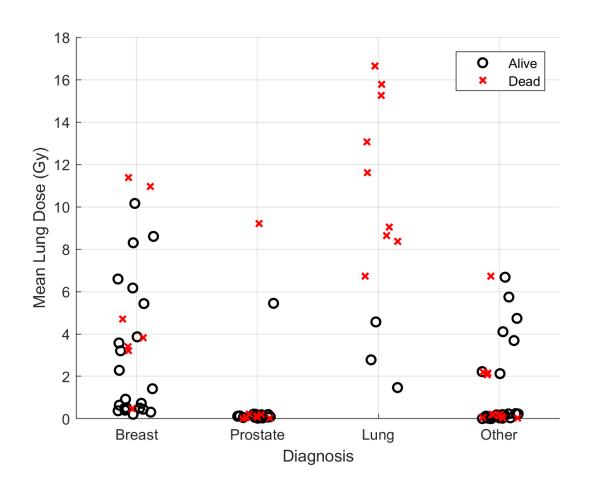
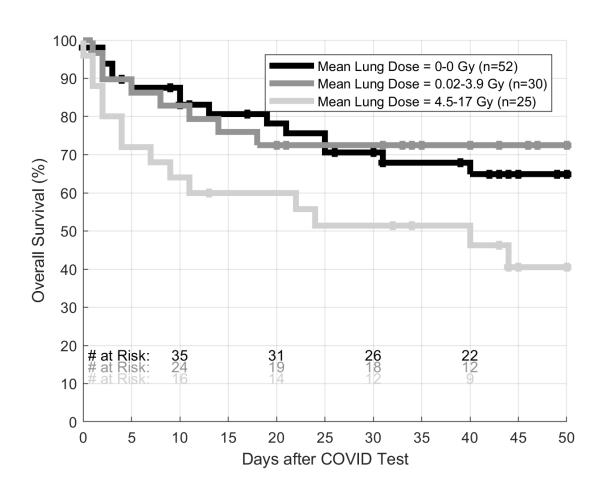


Figure 2: Updated Kaplan-Meier overall survival curves for patients grouped by mean lung radiotherapy dose.



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