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# A Reply to Zheng et al.

From the Authors:

We appreciate the authors' interest and response to our work (1). We agree with the authors that chronic obstructive pulmonary disease (COPD) is an important and prevalent comorbidity in patients with lung cancer. Moreover, the concern raised that the survival difference we observed might be linked to COPD rather than to pulmonary hypertension (PH) may be valid (2). For this purpose, we calculated the impact of COPD, specifically FEV<sub>1</sub> and FEV<sub>1</sub>/FVC, on the survival of patients with lung cancer using the Cox proportional hazard survival model. Notably, no significant impact of FEV<sub>1</sub> and FEV<sub>1</sub>/FVC on progression free survival (PFS) and overall survival (OS) was observed in our cohort of patients with lung cancer (Figure 1). Although the data may be insufficient to claim the absence of any effect of FEV<sub>1</sub> or FEV<sub>1</sub>/FVC on PFS or OS, this finding remarkably differs from the strong correlation between PFS/OS and pulmonary artery size (PA), and pulmonary artery to ascending aorta ratio (PA/A ratio) that we noted in the same patient cohort. In addition, we recalculated our Cox proportional hazard survival model

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after adjusting for FEV<sub>1</sub> and FEV<sub>1</sub>/FVC. Importantly, even after adjusting for FEV<sub>1</sub> and FEV<sub>1</sub>/FVC, our data set is sufficient to conclude that median OS is significantly reduced in patients with a PA size  $\geq$  28 mm (P=0.023) and PA/A ratio  $\geq$  1 (P<0.001). In conclusion, we believe that our data set provides strong evidence that an increased PA/PA/AA ratio, probably indicating PH, is the main predictor of survival in this lung cancer cohort.

In addition, to assess left heart diseases as a confounding factor for PH in patients with lung cancer, we would also like to emphasize that we already evaluated criteria of left heart disease in our study (1). As an example, we were not able to find any statistically significant difference in left ventricle ejection fraction between PA/A ratio > 1 and PA/A ratio > 1. This makes systolic left heart disease unlikely as the cause of our findings.

We agree with the authors that we first have to gather more insight on the causes of PH in lung cancer before we may consider treating patients with lung cancer for PH. To consolidate these findings, we are currently conducting a clinical trial (NCT04467333).

<u>Author disclosures</u> are available with the text of this letter at www.atsjournals.org.

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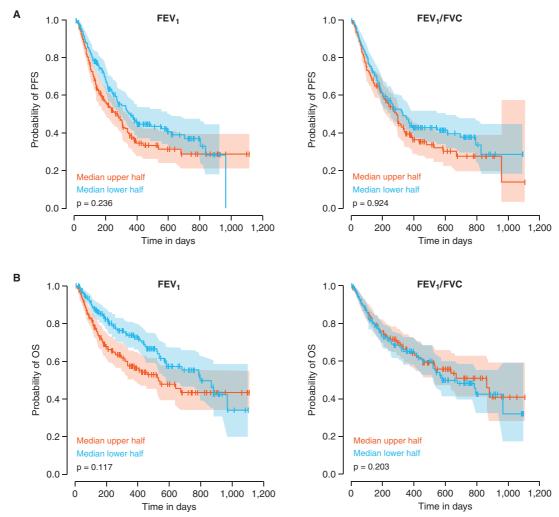
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**Figure 1.** Impact of FEV<sub>1</sub> and FEV<sub>1</sub>/FVC on survival in lung cancer. Survival curves for progression free survival (PFS, upper row) and overall survival (OS, lower row) stratified by FEV<sub>1</sub> (left, n = 462) as well as by FEV<sub>1</sub>/FVC (right, n = 481). Kaplan–Meier curves are displayed as arbitrarily determined by a median split (upper half and lower half) for better visualization.

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## Erratum: Author Name Correction in "Positive End-Expiratory Pressure, Pleural Pressure, and Regional Compliance during Pronation. An Experimental Study"

The article by Katira and colleagues (1), published in the May 15, 2021, issue of the *Journal*, contains an error in the author line. The

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name of one of the coauthors, Dr. Han Chen, was inadvertently misspelled as "Han Chan." For the convenience of our readers, the *Journal* is replacing the online version of the article with a corrected version.

### Reference

 Katira BH, Osada K, Engelberts D, Bastia L, Damiani LF, Li X, Chen H, Yoshida T, Amato MBP, Ferguson ND, Post M, Kavanagh BP, Brochard LJ. Positive end-expiratory pressure, pleural pressure, and regional compliance during pronation: an experimental study. Am J Respir Crit Care Med 2021;203: 1266–1274.

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