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| **Implications of the new lung function guidelines among ILD patients**  |
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| **Introduction/Aim:** Lung function testing remains a cornerstone in the assessment and management of patients with interstitial lung disease (ILD). The clinical impact of the new guidelines for lung function interpretation using the Global Lung function Initiative (GLI) reference equations remains uncertain.**Methods:** Adult ILD patients with baseline forced vital capacity (FVC) were included from the Australasian ILD registry and the National Healthcare Group ILD registry, Singapore. The GLI severity classification proposed in the 2022 lung function guidelines was compared to the 2005 guideline using the European Coal and Steel Community (ECSC) and Miller reference equations. The effect of using these new guidelines in ILD risk prediction models and eligibility for ILD clinical trial enrolment was also assessed. **Results:** The lung function results of 2219 patients were analyzed, of which 636 had idiopathic pulmonary fibrosis. Disagreement in lung function severity stratification were low at 9.3% and 7.3% for FVC and diffusing capacity of the lungs for carbon monoxide (DLCO) respectively, including after stratification by ethnicity and gender. Less patients with non-idiopathic pulmonary fibrosis ILD retained clinical trial eligibility. Risk prediction models, including the composite physiological index and ILD-GAP index, performed well in predicting mortality with both reference equations.**Conclusion:** The new lung function guideline using GLI reference equations remains a valid toold for the assessment of ILD patients.**Grant Support:** This project was supported by the Centre of Research Excellence in Pulmonary Fibrosis which is funded by the NHMRC (GNT1116371 and GNT2015613), Lung Foundation Australia, Boehringer Ingelheim, and anonymous philanthropy. |