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| **ILD registry gives new insights into the spectrum of disease in Australasia** |
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| **Introduction/Aim:** The AILDR is a prospective database collecting clinical data and outcome measures of participants with interstitial lung disease (ILD) across Australia and New Zealand (NZ) aiming to improve understanding and standardisation of care across a complex spectrum of diseases. We report the spectrum of diseases across regions and the prevalence of antifibrotic use.**Methods:** Participants attending any of the 22 registered ILD sites with a diagnosis of any ILD were invited to join the registry. Comprehensive baseline and longitudinal data including demographics, ILD diagnosis, objective functional testing, treatments and mortality are stored on a secure online platform. Data since registry inception in May 2016 to August 2023 inclusive has been analysed. **Results:** A total of 3193 participants were included (mean age 67.2±13 years; 1820 (57%) male; 2484 (77.8%) Caucasian; BMI 29.3±5.9 kg/m2; 1564 (49%) ever smokers.Top 5 diagnoses were idiopathic pulmonary fibrosis, IPF (29.3%), connective tissue disease-ILD (16%), unclassifiable (11.2%), chronic hypersensitivity pneumonitis, CHP (8.7%) and sarcoidosis (6.3%). Baseline lung function across regions is summarised in Table 1. Within the registry cohort, a diagnosis of IPF was more likely in NSW, QLD, VIC, SA and NZ compared to WA (OR 1.9272, 95% CI 1.4580 to 2.5475, P < 0.0001) and sarcoidosis similarly more likely in NZ and WA compared to elsewhere (OR 2.753, 95% CI 2.0547 to 3.6887, P < 0.0001).Antifibrotic use involved 19.6% of participants; indications included IPF (76.5%) and progressive fibrosing ILD, PF-ILD (23.5%). Of the PF-ILD anti-fibrotic cohort, unclassifiable ILD was the most common diagnosis (31.3%), followed by connective tissue disease-ILD (17%) and CHP (13.6%).**Conclusion:** This registry data demonstrates regional variation which may have many confounding factors including varying ILD prevalence, differences in health care delivery and clinical decision making. Further research is required to assist with standardisation of ILD health care delivery.**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. |

Table 1. Baseline lung function for Top 5 ILD diagnoses within AILDR according to country and state

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| **Diagnosis** | **Australia** | **New Zealand** | **Combined** |
|  | NSW | QLD | SA | VIC | WA |  |  |
| **IPF** | **n=394** | **n=68** | **n=15** | **n=241** | **n=76** | **n=140** | **n=934** |
| Mean FVC (L) | 2.8±0.8 | 3.0±0.9 | 2.7±0.8 | 2.9±0.9 | 3.2±1 | 3.1±0.9 | 2.9±0.9 |
| Mean FVC % pred | 80.9±17.7 | 79.1±20 | 76.1±17.7 | 82.1±17.9 | 86.7±19.9 | 87.5±18.8 | 82.5±18.4 |
| **CTD-ILD** | **n=231** | **n=25** | **n=5** | **n=95** | **n=89** | **n=67** | **n=512** |
| Mean FVC (L) | 2.5±0.8 | 2.8±1.2 | 2.1±0.5 | 2.6±0.9 | 2.7±0.9 | 2.8±0.8 | 2.6±0.9 |
| Mean FVC % pred | 73.7±19.3 | 76.3±25.5 | 76.9±28.5 | 75.9±20.5 | 80.4±19.2 | 82±20.4 | 76.5±20.2 |
| **Unclassifiable**  | **n=181** | **n=17** | **n=0** | **n=66** | **n=35** | **n=60** | **n=359** |
| Mean FVC (L) | 2.7±0.9 | 3.0±0.7 |  | 2.8±1.0 | 2.8±0.8 | 2.8±1.2 | 2.8±1.0 |
| Mean FVC % pred | 80.4±19.2 | 77.8±13.5 |  | 79.1±23.5 | 81.4±17.8 | 85.5±23.7 | 81±20.4 |
| **CHP** | **n=100** | **n=18** | **n=5** | **n=75** | **n=30** | **n=50** | **n=278** |
| Mean FVC (L) | 2.2±0.8 | 2.4±0.6 | 4.1±1.3 | 2.6±0.8 | 2.3±0.8 | 2.5±0.9 | 2.4±0.9 |
| Mean FVC % pred | 70.9±19.5 | 72.2±19.4 | 93.1±12.6 | 71.8±20.1 | 74.4±16.1 | 74.8±18.9 | 72.7±19.2 |
| **Sarcoidosis** | **n=62** | **n=1** | **n=1** | **n=38** | **n=43** | **n=57** | **n=202** |
| Mean FVC (L) | 3.8±0.9 | 3.5 | 3.6 | 3.77±1.1 | 3.6±1.2 | 3.6±1.2 | 3.7±1.1 |
| Mean FVC % pred | 86±15.9 | 100 | 99 | 83.9±18.4 | 86.2±20.1 | 88.5±20 | 86.5±18.4 |

± standard deviation