

E-supplement

Table E1. Criteria for Independent Adjudication of ILD diagnosed at non-tertiary centers.*#

	Frequency
Thoracic CT scan report noting honeycombing or traction bronchiectasis	245
Thoracic CT scan report noting reticulation and ground glass opacities	96
Thoracic CT scan report noting reticulation; and patient requires supplemental oxygen	43
Thoracic CT scan report noting reticulation; and pulmonary crackles on physical examination	104
Thoracic CT scan report noting ground glass opacities, pulmonary crackles on examination and moderate to severe restrictive PFT pattern	107
Thoracic CT scan report noting ground glass opacities, patient requires supplemental oxygen and has moderate to severe restrictive PFT pattern	55
Thoracic CT scan report noting ground glass opacities, and DLCO below 50% predicted	109
Pulmonary crackles on examination and moderate or severe restrictive PFT pattern	244
Moderate or severe restrictive PFT pattern and DLCO below 70%	317
Pulmonary crackles, patient requires supplemental oxygen and DLCO below 50%	72

*All patients performed Chest-CT scan, pulmonary function tests, and were subsequently diagnosed with ILD after pulmonologist evaluation at the non-tertiary center

#Participants were eligible for more than one criterion

Table E2. Unadjusted and Adjusted Odds Ratio of ILD sub-category diagnosis Among African-American Patients with Multidisciplinary (MDD) and adjudicated diagnosis of ILD

Characteristics	Tertiary Referral Medical Center (n=1,152)			Non-Tertiary Academic Medical Centers (n=488)			Pooled Population (n=1,640)		
	OR	95% CI	P-value	OR	95% CI	P-value	OR	95% CI	P-value
<i>Univariate Logistic Regression</i>									
IPF	0.23	0.14 – 0.36	<0.001	0.20	0.08 – 0.48	<0.001	0.18	0.12 – 0.28	<0.001
CHP	0.27	0.13 – 0.57	<0.001	--	--	--	0.34	0.17 – 0.71	0.004
IPAF	1.19	0.78 – 1.80	0.414	2.49	0.30 – 21.04	0.401	1.56	1.04 – 2.34	0.030
CTD-ILD	5.57	4.01 – 7.75	<0.001	8.73	2.50 – 30.49	0.001	6.88	5.04 – 9.39	<0.001
Unclassifiable/Others	0.76	0.51 – 1.14	0.187	2.90	1.32 – 6.35	0.008	0.87	0.62 – 1.23	0.430
<i>Multivariable Logistic Regression*</i>									
IPF	0.29	0.17 – 0.50	<0.001	0.19	0.08 – 0.48	<0.001	0.21	0.13 – 0.32	<0.001
CHP**	0.19	0.09 – 0.43	<0.001	--	--	--	0.28	0.12 – 0.62	0.002
IPAF	1.15	0.73- 1.83	0.540	1.22	0.11 – 13.27	0.871	1.66	1.07 – 2.58	0.023
CTD-ILD	4.48	2.97 – 6.76	<0.001	6.59	1.63 – 26.70	0.008	6.28	4.32 – 9.12	<0.001
Unclassifiable/Others	0.98	0.41 – 2.31	0.961	1.68	0.71 – 3.99	0.238	0.86	0.52 – 1.42	0.556

*Adjusted for age, gender, body mass index, smoking status, co-morbid diseases and referral status

**Regression estimates incalculable due to decreased subgroup numbers at the non-tertiary medical centers

Table E3. Sensitivity Analysis Evaluating Association between African-American Race, Mortality, All-Cause Hospitalizations, and Respiratory Hospitalizations in Patients with Code-based ILD (n=9,503)

Characteristics	Tertiary Referral Medical Center			Non-Tertiary Academic Medical Centers			Pooled Population		
	AA patients	Non-AA Patients	P value	AA patients	Non-AA patients	P Value	AA patients	Non-AA patients	P value
ICD-9 code diagnosis of ILD, n (%)	2297(44.2)	2895 (55.8)	--	251 (5.8)	4060 (94.2)	--	2548 (26.8)	6955 (73.2)	--
Mean survival time, (95% CI), months	102 (100 – 104)	101 (100 – 103)	0.466	104 (97 – 111)	88 (86 – 90)	<0.001	102 (100 – 104)	95 (94 – 96)	<0.001
Mortality, No. (%)	527 (22.9)	660 (22.8)	0.923	43 (17.0)	1276 (31.4)	<0.001	570 (22.3)	1936 (27.8)	<0.001
Lung transplantation, No. (%)	13 (0.6)	38 (1.3)	0.007	0 (0.4)	2 (0.05)	0.725	13 (0.5)	40 (0.6)	0.707
Propensity Score Models[#]	HR	95% CI	P Value	HR	95% CI	P Value	HR	95% CI	P value
Unadjusted model	0.76	0.60-0.97	0.025	0.66	0.42-1.06	0.084	0.72	0.55-0.82	0.002
Adjusted model*	0.63	0.44-0.91	0.013	0.88	0.50-1.56	0.674	0.60	0.44-0.81	0.001
Plus referral status	0.63	0.44-0.91	0.014	0.91	0.51-1.62	0.081	0.59	0.43-0.80	0.001
Plus immunosuppressive therapy	0.64	0.45-0.92	0.017	0.89	0.50-1.59	0.697	0.59	0.43-0.81	0.001
Plus income level	0.67	0.46-0.98	0.037	0.87	0.47-1.59	0.647	0.60	0.43-0.83	0.002
Plus insurance type	0.68	0.46-0.99	0.044	0.90	0.49-1.64	0.724	0.59	0.43-0.83	0.002
All-Cause Hospitalizations	AA patients	Non-AA Patients	P value	AA patients	Non-AA patients	P Value	AA patients	Non-AA patients	P value
Number of hospitalized patients, n (%)	986 (42.9)	804 (27.8)	<0.001	240 (95.6)	3611 (88.9)	<0.001	1226 (48.1)	4415 (63.5)	<0.001
Risk of hospitalization, OR	1.96	--	<0.001	2.71	--	<0.001	0.53	--	<0.001
Hospitalizations per patient**, IRR (SE)	1.20	--	0.001	0.71	--	<0.001	0.95	--	0.231

* adjusted for baseline demographic characteristics - age, gender, body mass index, smoking status, co-morbid diseases (coronary artery disease, gastroesophageal reflux, diabetes mellitus), geographical residence, and ILD subtype.

after propensity score matching, n=2471 in pooled population; tertiary medical center, n=2039 (AA=1480, non-AA=559); non-tertiary medical center, n=432 (AA=210, non-AA=222) ILD=interstitial lung disease; GAP=gender, age, physiology; OR=log odds ratio; IRR=incidence rate ratio; IQR=interquartile range; SE=standard error

**evaluated among hospitalized patients

Table E4. Sensitivity Analysis Adjusting Propensity Score for Co-morbid diseases, Use of Antifibrotic, ANA seropositivity, Total Lung Capacity, Six-minute Walk Distance, and Radiologic Honeycomb Fibrosis in Patients with Multidisciplinary and adjudicated ILD

Propensity Score Models [#]	Tertiary Referral Medical Center			Non-Tertiary Academic Medical Centers			Pooled Population		
	HR	95% CI	P Value	HR	95% CI	P Value	HR	95% CI	P value
Unadjusted model	0.48	0.30-0.78	0.003	0.67	0.15-2.92	0.593	0.51	0.32-0.80	0.004
Adjusted model*	0.43	0.25-0.72	0.002	0.43	0.09-2.16	0.305	0.48	0.29-0.79	0.004
Plus referral status	0.43	0.25-0.73	0.002	0.43	0.09-2.16	0.305	0.48	0.29-0.79	0.004
Plus immunosuppressive therapy	0.43	0.25-0.73	0.002	0.42	0.08-2.17	0.303	0.48	0.29-0.79	0.004
Plus income level	0.43	0.25-0.73	0.002	0.36	0.07-1.95	0.238	0.47	0.29-0.78	0.003
Plus insurance type	0.43	0.25-0.73	0.002	0.32	0.07-1.61	0.168	0.46	0.28-0.77	0.003
Plus antifibrotic therapy	0.43	0.25-0.74	0.002	0.19	0.02-1.65	0.133	0.45	0.27-0.74	0.002
Plus ANA seropositivity	0.35	0.19-0.65	0.001	--	--	--	0.34	0.19-0.60	<0.001
Plus total lung capacity	0.34	0.18-0.64	0.001	--	--	--	0.32	0.18-0.57	<0.001
Plus six-minute walk distance	0.28	0.15-0.54	<0.001	--	--	--	0.29	0.15-0.5	<0.001
Plus honeycomb fibrosis	0.31	0.17-0.58	<0.001	--	--	--	0.32	0.18-0.60	<0.001

* adjusted for baseline demographic characteristics – body mass index, age, gender, percent predicted forced vital capacity, percent predicted diffusing capacity of the lung for carbon monoxide, and ILD subtype; GAP-ILD score.

after propensity score matching, after propensity score matching, n=306 in pooled population; tertiary medical center, n=262 (AA=156, non-AA=106); non-tertiary medical center, n=44 (AA=24, non-AA=20). ILD=interstitial lung disease; OR=log odds ratio; IRR=incidence rate ratio; IQR=interquartile range; SE=standard error

Table E5. Causes of Respiratory-related Hospitalizations among patients with Multidisciplinary (MDD) and adjudicated ILD diagnosis.#

	Frequency
Other respiratory worsening	
Increased dyspnea	331
Hypoxia	237
Respiratory distress	242
Other unclassifiable acute respiratory worsening	104
Respiratory-tract infection or pneumonia	115
Respiratory failure (requiring mechanical ventilation)	86
COPD exacerbation	31
Elective admission for lung biopsy*	128
Acute exacerbation of ILD (physician diagnosed)	139
Pneumothorax	9
Aspiration event	6
Pulmonary embolism	16
Elective admission for lung transplantation*	33
Pulmonary hypertension	20

*Not included in respiratory hospitalization

#Participants were eligible for more than one criterion

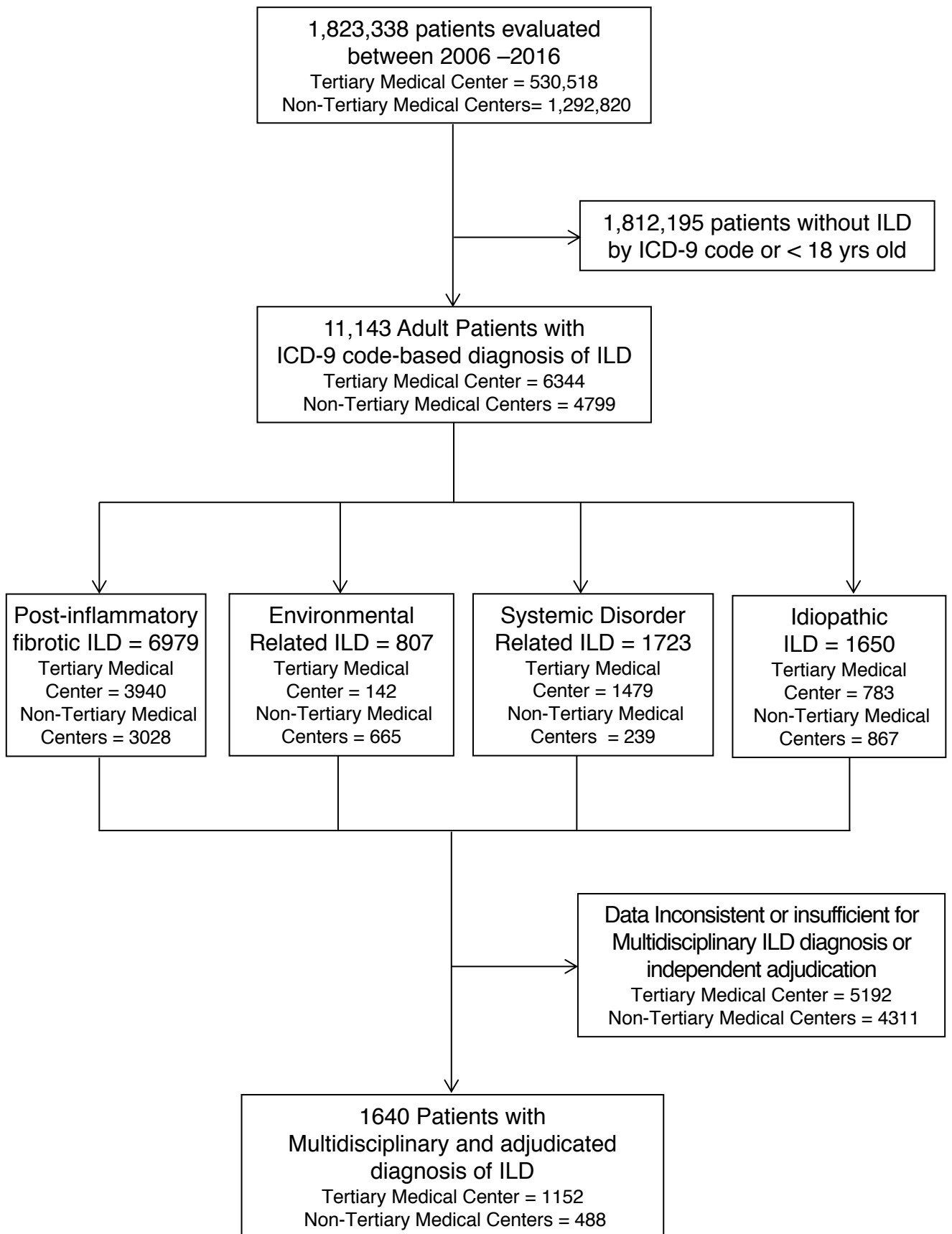


Figure E1. CONSORT diagram

A.

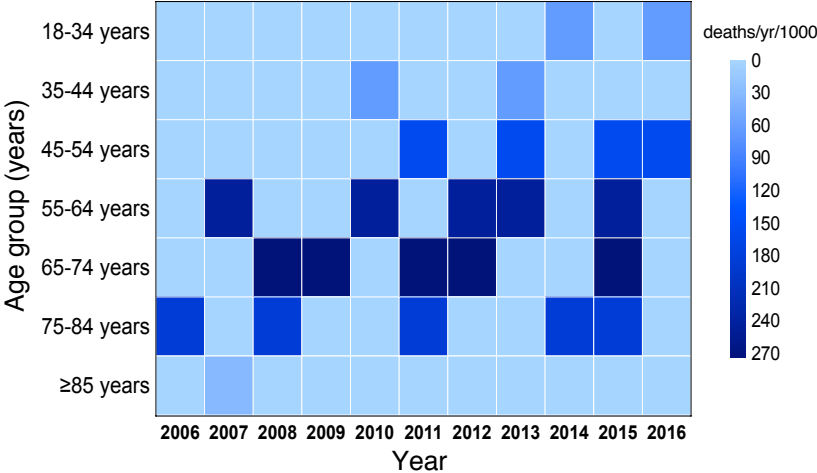
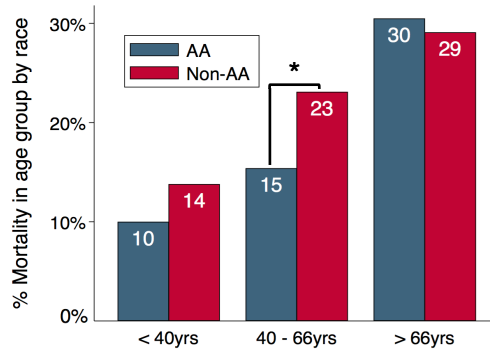
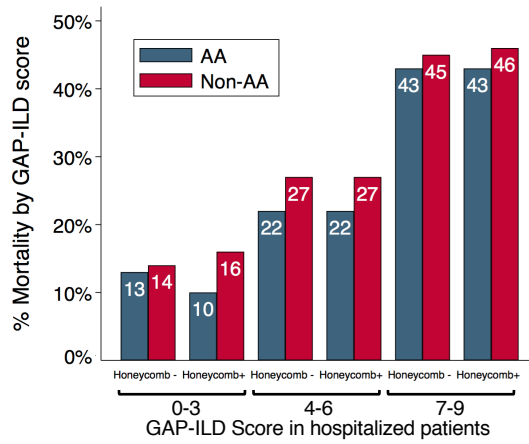


Figure E2. Age-standardized annual mortality rates (AMR) among African-American patients with multidisciplinary (MDD) and adjudicated diagnosis of ILD stratified by age group; population AMR depicted per thousand patients with ILD.

A.



B.



C.

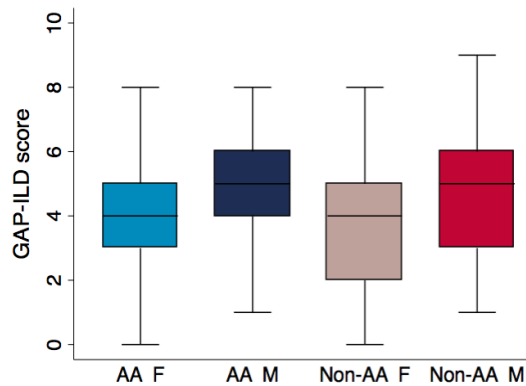


Figure E3 (a) Percentage distribution of mortality in multidisciplinary (MDD) and adjudicated ILD cohort stratified by age group and race. Percentage distribution of **(b)** mortality in MDD and adjudicated ILD cohort substratified by race, radiographic honeycombing and GAP-ILD score; and **(c)** distribution of GAP-ILD score stratified by race and gender. AA=African-American; ILD=interstitial lung disease; GAP=gender, age, physiology. *P<0.05.