## Supplementary material

 $\underline{\textbf{Supplementary Table 1}}: \textbf{Characteristics and description of all physicians who participated in the study and differences based on physician gender}$ 

	Female MD	Male MD	All	p-value
	137 (34%)	262 (66%)	404 (5 genders	
			missing)	
Academic practice	110 (80%)	176 (67)	288	0.006
Fellowship training				0.005
In training	12 (9%)	5 (2%)	17	
Yes	117 (85%)	238 (90%)	359	
No	8 (6%)	19 (7%)	28	
Years of experience				
Mean years (SD)	13.49 (9.14)	17.2 (10.47)	15.81 (14.8)	0.001
0-5	36 (26%)	37 (14)	73	0.015
6-10	28 (20%)	57 (22%)	85	
11-15	25 (18%)	40 (15%)	65	
16-20	19 (14%)	42 (16%)	61	
>20	29 (21%)	86 (33%)	115	
Continent of practice				0.019
Africa	3 (2%)	0	3	
Americas	41 (30%)	99 (38%)	140	
Asia	15 (11%)	38 (15%)	55	
Europe	67 (49%)	110 (42%)	177	
Middle East	2 (1%)	8 (3%)	10	
Oceania	9 (7%)	7 (3%)	16	
Access to ILD specific	82 (60%)	135 (52%)	217	0.28
MDT				

<u>Supplementary Table 2.</u> Unadjusted logistic regression for the odds of a leading diagnosis of IPF (vs non-IPF)

	Odds ratio for a	95% CI	p-value
	diagnosis of IPF		
Patient male gender	5.13	4.78 to 5.51	0.000
Age (per year increase)	1.06	1.059 to 1.063	0.000
Presence of any autoantibody	0.79	0.75 to 0.84	0.000
FVC (per 10% point decrease)	1.00	0.99 to 1.01	0.87
DLCO (per 10% point decrease)	1.43	1.40 to 1.46	0.000
Ever smoker	3.64	3.39 to 3.89	0.000
Environmental exposure (any)	0.91	0.84 to 0.98	0.015
Serum precipitins (any)	0.83	0.78 to 0.89	<0.001
Physician male gender	1.02	0.97 to 1.09	0.36

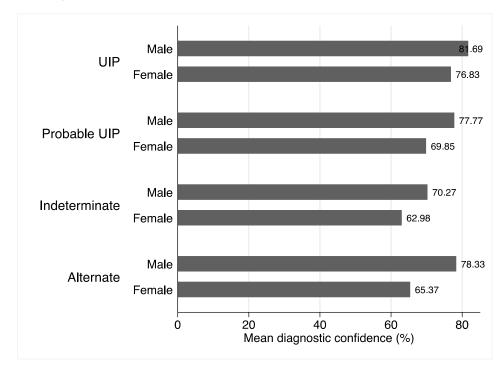
Supplementary Table 3. Differences in mean diagnostic confidence for IPF based on patient gender and UIP pattern on CT

	Pattern on CT	Diagnostic confidence	Diagnostic	p-value
		Female patients	confidence Male	
		Mean (SD)	patients	
			Mean (SD)	
	Definite UIP	76.8% (74.9 to 78.7)	81.7% (80.9 to 82.5)	<0.0001
2011	Possible UIP	68.9% (67.2 to 70.5)	77.8% (77 to 78.5)	<0.0001
guidelines	Inconsistent with	66.4% (63.2 to 69.6)	72.7% (71.4 to 74.1)	0.0001
	UIP			
	UIP	76.8% (74.9 to 78.7)	81.7% (80.1 to 82.5)	<0.0001
2018	Probable UIP	69.9% (68.2 to 71.5)	77.8% (77.0 to 78.5)	<0.0001
guidelines	Indeterminate	63% (58.1 to 67.9)	70.3% (68.6 to 71.9)	0.005
	Alternate diagnosis	65.4% (61.9 to 68.9)	78.3% (75.8 to 80.8)	<0.0001

<u>Supplementary Table 4.</u> Level of diagnostic confidence for first diagnosis of each case-score based on scoring physician gender

Diagnosis	All	Female	Male physicians	p-value
		physicians		
Overall	72.22 (20.91)	71.98 (20.83)	72.35 (20.95)	0.19
IPF	77.32	76.72 (19.17)	77.63 (19.03)	0.08
CTD	70.63 (20.41)	70.44 (20.0)	70.73 (20.65)	0.68
cHP	66.73 (20.0)	67.12 (19.84)	65.97 (20.28)	0.15
Unclassifiable	69.2 (21.95)	71.69 (22.57)	68.04 (21.58)	0.02

<u>Supplementary Figure.</u> Mean diagnostic confidence for a receiving a diagnosis of IPF based on patient sex and pattern of disease on CT



Caption: The diagnosis of IPF is made with significantly greater confidence for patients who are male compared to female, across all CT patterns for UIP (usual interstitial pneumonia).