

Supplemental Appendix to:

Minimum important difference of the EQ5D and EQ-VAS in fibrotic interstitial lung disease

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Subgroup analysis comparison of baseline characteristics

Table E1. Baseline characteristics across ILD subtypes.

Patient characteristics at 6 months follow up

Table E2. Baseline characteristics of patients with and without 6-month follow-up.

Subgroup analysis of MID for EQ-5D-5L

Table E3. IPF subgroup analysis of anchor- and distribution-based estimates of MID for EQ-5D-5L

Table E4. CTD-ILD subgroup analysis of anchor- and distribution-based estimates of MID for EQ-5D-5L

Table E1. Baseline patient characteristics across ILD subtypes.

Variable	IPF	CTD-ILD	HP	Unclassifiable ILD	Other ILDs
Total sample size	472 (26%)	665 (37%)	135 (7%)	314 (17%)	55 (3%)
Age, years	71 ± 9	60 ± 12	63 ± 11	67 ± 11	62 ± 17
Male sex	346 (73%)	214 (32%)	56 (41%)	175 (56%)	27 (49%)
Ever-smoker	352 (75%)	336 (51%)	77 (57%)	200 (64%)	28 (51%)
Smoking pack-years	27 (11-38)	20 (5-30)	24 (8-36)	25 (8-36)	33 (18-45)
FVC, %-predicted	74 ± 19	74 ± 20	68 ± 20	76 ± 20	79 ± 22
DLCO, %-predicted	50 ± 17	57 ± 19	54 ± 18	59 ± 20	64 ± 27
6MWD, meters	393 ± 133	433 ± 125	400 ± 121	415 ± 128	456 ± 113
SGRQ total score	43 ± 20	42 ± 20	50 ± 18	50 ± 19	50 ± 20
UCSDSOBQ total score	36 ± 27	37 ± 26	43 ± 27	40 ± 29	44 ± 29
EQ-5D-5L	0.79 ± 0.16	0.77 ± 0.19	0.76 ± 0.18	0.75 ± 0.22	0.73 ± 0.22
EQ-VAS	69 ± 19	68 ± 19	63 ± 19	67 ± 20	65 ± 20

Data shown are number (%), mean ± standard deviation, or median (interquartile range).

Abbreviations: 6MWD, 6-minute walk distance; CTD-ILD, connective tissue disease-associated ILD; DLCO, diffusing capacity of the lung for carbon monoxide; EQ-5D-5L, European Quality of Life 5 Dimensions 5 Levels questionnaire; EQ-VAS, European Quality of Life visual analogue scale; FVC, forced vital capacity; HP, hypersensitivity pneumonitis; ILD, interstitial lung disease; IPF, idiopathic pulmonary fibrosis; SD, standard deviation; SGRQ, St. George's Respiratory Questionnaire; UCSD-SOBQ, University of California, San Diego Shortness of Breath Questionnaire.

Table E2. Baseline characteristics of patients with and without 6-month follow-up.

Variable	Patients with 6-month data available	Patients without 6-month data available
Total patients	636	1180
Age, years	61 ± 13	63 ± 15
Male sex	326 (52%)	914 (50%)
Ever-smoker	426 (64%)	1108 (61%)
Smoking pack-years	24 (7-36)	25 (8-36)
FVC, %-predicted	74 ± 19	74 ± 20
DLCO, %-predicted	57 ± 19	57 ± 20
6MWD, meters	433 ± 122	417 ± 127
SGRQ total score	43 ± 19	45 ± 20
UCSD SOBQ total score	35 ± 25	38 ± 27
EQ-5D-5L	0.785 ± 0.18	0.771 ± 0.19
EQ-VAS	69 ± 19	68 ± 19

Data shown are number (%), mean ± standard deviation, or median (interquartile range).

Abbreviations: 6MWD, 6-minute walk distance; DLCO, diffusing capacity of the lung for carbon monoxide; EQ-5D-5L, European Quality of Life 5 Dimensions 5 Levels questionnaire; EQ-VAS, European Quality of Life visual analogue scale; FVC, forced vital capacity; IQR, interquartile range; SGRQ, St. George's Respiratory Questionnaire; UCSD-SOBQ, University of California, San Diego Shortness of Breath Questionnaire.

Table E3. IPF subgroup analysis of anchor- and distribution-based estimates of MID for EQ5D.

Anchor-based MID			
EQ-5D-5L	Linear regression equation	MID for anchor	EQ-5D-5L MID
SGRQ	EQ-5D-5L = 1.031 - 0.006*SGRQ	5 to 8	0.030 to 0.046
UCSDSOBQ	EQ-5D-5L = 0.952 - 0.004*UCSD	5	0.022
FVC	EQ-5D-5L = 0.631 + 0.0022*FVC	2 to 6	0.0044 to 0.013
DLCO	EQ-5D-5L = 0.687 + 0.00239*DLCO	11	0.026
6MWD	EQ-5D-5L = 0.684 + 0.00032*6MWD	20.7 to 35.4m	0.0065 to 0.011
EQ-VAS	Linear regression equation	MID for anchor	EQ-VAS MID
SGRQ	EQ-VAS = 95.35 - 0.61*SGRQ	5 to 8	3.067 to 4.91
UCSD	EQ-VAS = 83.96 - 0.40*UCSD	5	2.02
FVC	EQ-VAS = 50.50 + 0.25*FVC	2 to 6	0.50 to 1.51
DLCO	EQ-VAS = 52.38 + 0.34*DLCO	11	3.79
6MWD	EQ-VAS = 50.26 + 0.054*6MWD	20.7 to 35.4m	1.13 to 1.92
Distribution-based MID			
	SEM	One-half SD	
EQ-5D-5L	0.073	0.082	
EQ-VAS	8.5	9.5	

Abbreviations: 6MWD, 6-minute walk distance; DLCO, diffusing capacity of the lung for carbon monoxide; EQ-5D-5L, European Quality of Life 5 Dimensions 5 Levels questionnaire; EQ-VAS, European Quality of Life visual analogue scale; FVC, forced vital capacity; SGRQ, St. George's Respiratory Questionnaire; UCSD-SOBQ, University of California, San Diego Shortness of Breath Questionnaire.

Table E4. CTD-ILD subgroup analysis of anchor- and distribution-based estimates of MID for the EQ5D.

Anchor-based MID			
EQ-5D-5L	Linear regression equation	MID for anchor	EQ-5D-5L MID
SGRQ	EQ-5D-5L = 1.028 - 0.006*SGRQ	5 to 8	0.032 to 0.052
UCSD	EQ-5D-5L = 0.946 - 0.005*UCSD	5	0.024
FVC	EQ-5D-5L = 0.578 + 0.003*FVC	2 to 6	0.0053 to 0.016
DLCO	EQ-5D-5L = 0.627 + 0.003*DLCO	11	0.031
6MWD	EQ-5D-5L = 0.518 + 0.00059*6MWD	20.7 to 35.4m	0.012 to 0.021
EQ-VAS	Linear regression equation	MID for anchor	EQ-VAS MID
SGRQ	EQ-VAS = 92.89 - 0.61*SGRQ	5 to 8	3.05 to 4.88
UCSD	EQ-VAS = 83.25 - 0.42*UCSD	5	2.18
FVC	EQ-VAS = 49.67 + 0.26*FVC	2 to 6	0.51 to 1.54
DLCO	EQ-VAS = 53.70 + 0.28*DLCO	11	3.08
6MWD	EQ-VAS = 43.19 + 0.059*6MWD	20.7 to 35.4m	1.22 to 2.08
Distribution-based MID			
	SEM	One-half SD	
EQ-5D-5L	0.076	0.095	
EQ-VAS	7.7	9.6	

Abbreviations: 6MWD, 6-minute walk distance; DLCO, diffusing capacity of the lung for carbon monoxide; EQ-5D-5L, European Quality of Life-5 Dimensions 5 Levels questionnaire; EQ-VAS, European Quality of Life visual analogue scale; FVC, forced vital capacity; MID, minimum important difference; SD, standard deviation; SGRQ, St. George's Respiratory Questionnaire; UCSD-SOBQ, University of California, San Diego Shortness of Breath Questionnaire.