

|Supplemental Material

Assessing Patterns of Palliative Care Referral and Location of Death in Patients with Idiopathic Pulmonary Fibrosis: A 16-Year Single-Center Retrospective Cohort Study

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	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Death (n, %)	559 (86%)	574	489 (85%)	74	70 (95%)	0.027
Death:		315		61		0.009
Hospital (n, %)	211 (56%)		186 (59%)		25 (41%)	
Home or Hospice (n, %)	165 (44%)		129 (41%)		36 (59%)	
Death: Academic ICU (n, %)	107 (51%)	186	94 (51%)	25	13 (52%)	0.89

s-Table 1. Location of Death (2000 to 2012). PC referral recipients had less in-hospital death. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care. ICU=intensive care unit.

	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Death (n, %)	77 (43%)	142	47 (33%)	38	30 (79%)	<0.001
Death:		32		24		0.16
Hospital (n, %)	34 (61%)		22 (69%)		12 (50%)	
Home or Hospice (n, %)	22 (39%)		10 (31%)		12 (50%)	
Death: Academic ICU (n, %)	18 (56%)	21	13 (62%)	11	5 (45%)	0.37

s-Table 2. Location of Death (2013 to 2016). PC referral recipients had lower percentage of in-hospital death. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care. ICU=intensive care unit.

	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Age at Diagnosis (years)	69 (63-75)	566	69 (63-75)	74	71 (65-76)	0.069
Age at Death (years)	74 (67-79)	489	73 (67-79)	70	76 (69-81)	0.015
Male (n, %)	397 (61%)	574	353 (62%)	74	44 (59%)	0.74
White Non-Hispanic (n, %)	631 (97%)	574	559 (97%)	74	72 (97%)	0.96
Smoker (n, %)	437 (68%)	572	392 (69%)	72	45 (63%)	0.36
Tobacco (pack years)*	23.8 (26.9)	538	23.2 (25.6)	71	28.4 (34.6)	0.22
Initial Oxygen Requirement (L)*	1.12 (1.84)	568	1.13 (1.84)	73	1.07 (1.89)	0.79
Initial Oxygen Requirement >0L (n, %)	212 (33%)	568	190 (34%)	73	22 (30%)	0.57
Diagnosis to Initial Visit (days)	285 (0-650)	566	289 (2-679)	74	228 (0-453)	<0.001
Diagnosis to Death (days)	1281 (668-2067)	488	1257 (659-2007)	70	1539 (805-2339)	0.13
Distance from Center (miles)	52 (16-112)	572	59 (20-120)	73	15 (10-33)	<0.001
Number of Center Visits	4 (2-8)	574	3 (2-8)	73	7 (3-15)	<0.001
Support Group (n, %)	162 (25%)	574	125 (22%)	74	37 (50%)	<0.001
Charlson Index*	0.73 (1.02)	574	0.71 (1.01)	74	0.82 (1.06)	0.40
Charlson Index ≥ 1 , (n, %)	282 (44%)	574	243 (42%)	74	39 (53%)	0.090

s-Table 3. Baseline Patient Demographics (2000 to 2012). PC referral recipients resided closer to the outpatient center and had more follow-up visits. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care.

	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Initial FVC %	64 (51-77)	539	63 (50-76)	71	65 (55-78)	0.17
Initial DLco %	42 (31-57)	472	42 (30-56)	60	49 (35-58)	0.10
Last FVC %	58 (45-72)	341	58 (45-72)	61	59 (45-71)	0.49
Last DLco %	37 (27-54)	253	37 (28-55)	51	34 (24-50)	0.13
Initial GAP Index*	4.2 (1.5)	470	4.2 (1.5)	60	3.8 (1.3)	0.07
Initial GAP Stage ≥ 2 (n, %)	370 (69%)	470	337 (72%)	60	33 (55%)	0.008

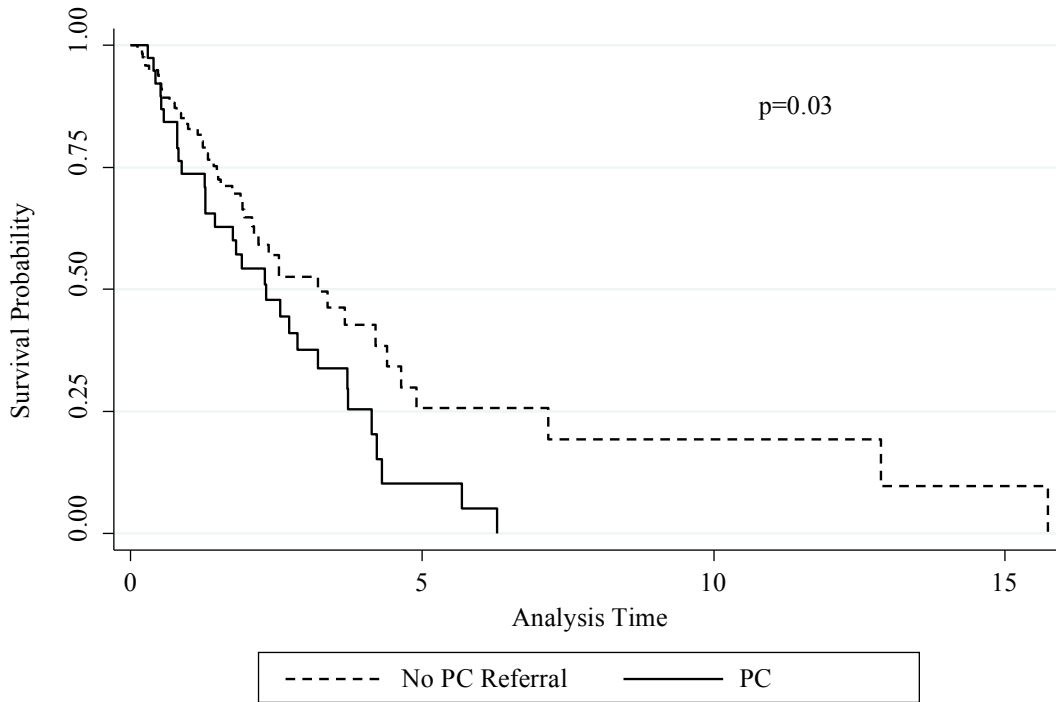
s-Table 4. Pulmonary Characteristics (2000 to 2012). There were no differences in initial pulmonary function. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care. FVC=forced vital capacity. DLco=diffusing capacity of lungs for carbon monoxide. GAP=Gender, Age, and Physiology.

	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Age at Diagnosis (years)	71 (65-77)	141	70 (64-76)	38	74 (68-80)	0.004
Age at Death (years)	73 (67-79)	47	73 (65-79)	30	75 (68-82)	0.24
Male (n, %)	126 (70%)	142	105 (74%)	38	21 (55%)	0.026
White Non-Hispanic (n, %)	156 (95%)	128	123 (96%)	37	33 (89%)	0.10
Smoker (n, %)	122 (68%)	142	99 (70%)	38	23 (61%)	0.10
Tobacco (pack years)*	21.7 (29.0)	135	21.6 (26.5)	37	21.9 (37.1)	0.97
Initial Oxygen Requirement (L)*	1.0 (1.8)	142	0.9 (1.7)	38	1.4 (1.8)	0.11
Initial Oxygen Requirement >0L (n, %)	55 (31%)	142	38 (27%)	38	17 (45%)	0.033
Diagnosis to Initial Visit (days)	0 (0-133)	142	0 (0-103)	38	0 (0-536)	0.64
Diagnosis to Death (days)	541 (276-992)	47	520 (198-928)	30	650 (290-1171)	0.82
Distance from Center (miles)	37 (12-86)	142	39 (13-86)	38	23 (12-81)	0.15
Number of Center Visits	6 (3-9)	142	5 (3-9)	38	8 (5-10)	0.13
Support Group (n, %)	16 (9%)	142	14 (10%)	38	2 (5%)	0.38
Charlson Index*	0.89 (1.24)	142	0.82 (1.22)	38	1.18 (1.31)	0.13
Charlson Index \geq1, (n, %)	84 (47%)	142	61 (43%)	38	23 (61%)	0.054

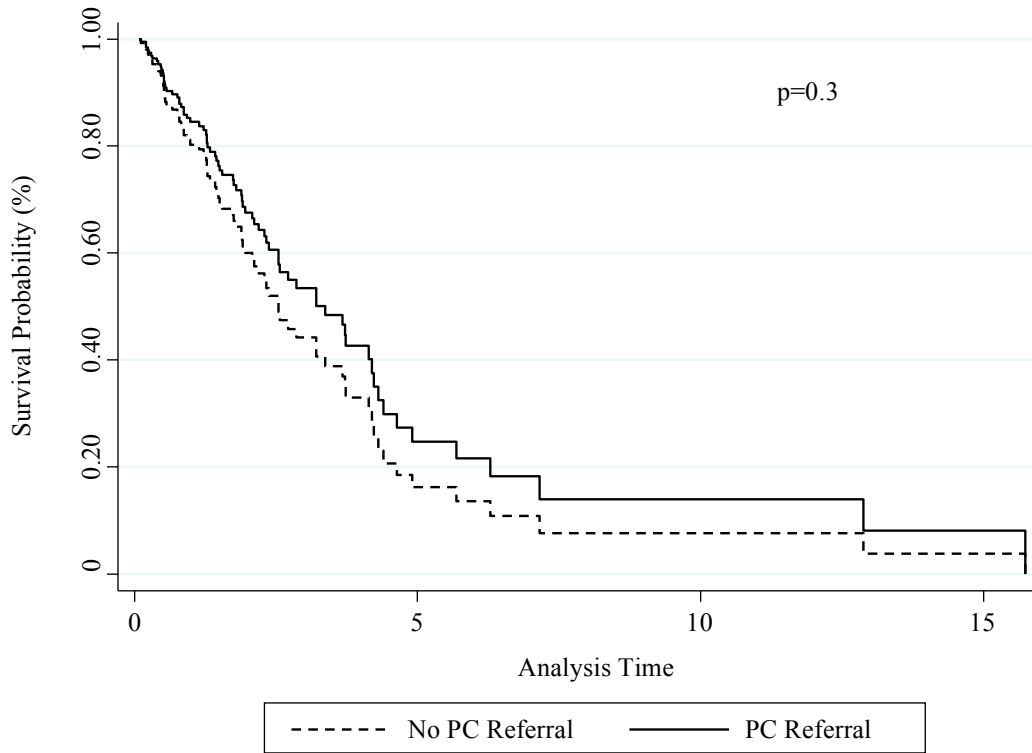
s-Table 5. Baseline Patient Demographics (2013 to 2016). PC referral recipients were older. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care.

	All	No PC		PC		P Value
	Results	n	Results	n	Results	
Initial FVC %	67 (53-80)	137	69 (58-81)	38	54 (50-67)	<0.001
Initial DLco %	48 (35-66)	124	50 (38-67)	34	38 (28-58)	0.002
Last FVC %	64 (48-76)	97	67 (54-77)	30	49 (36-65)	0.035
Last DLco %	43 (31-57)	85	45 (32-58)	19	38 (30-50)	0.11
Initial GAP Index*	3.9 (1.5)	124	3.8 (1.5)	34	4.4 (1.3)	0.010
Initial GAP Stage \geq2 (n, %)	91 (58%)	124	65 (52%)	34	26 (76%)	0.012

s-Table 6. Pulmonary Characteristics (2013 to 2016). PC referral recipients had worse initial pulmonary function. Values are documented as median or percentages (IQR), except when marked *, indicating mean (SD). PC=palliative care. FVC=forced vital capacity. DLco=diffusing capacity of lungs for carbon monoxide. GAP=Gender, Age, and Physiology.



s-Figure 1. Kaplan-Meier Survival Curve (2013 to 2016). Mortality estimates for patients who received PC (solid) compared with those who did not receive PC (dashed). PC referral recipients had lower survival ($p=0.034$). PC=palliative care.



s-Figure 2. Kaplan-Meier Survival Curve (2013 to 2016). Mortality estimates for patients who received PC (red) compared to those who did not receive PC (blue), adjusted by baseline FVC% and initial oxygen requirement by adjusted Cox model. There were no survival differences between groups. PC=palliative care.