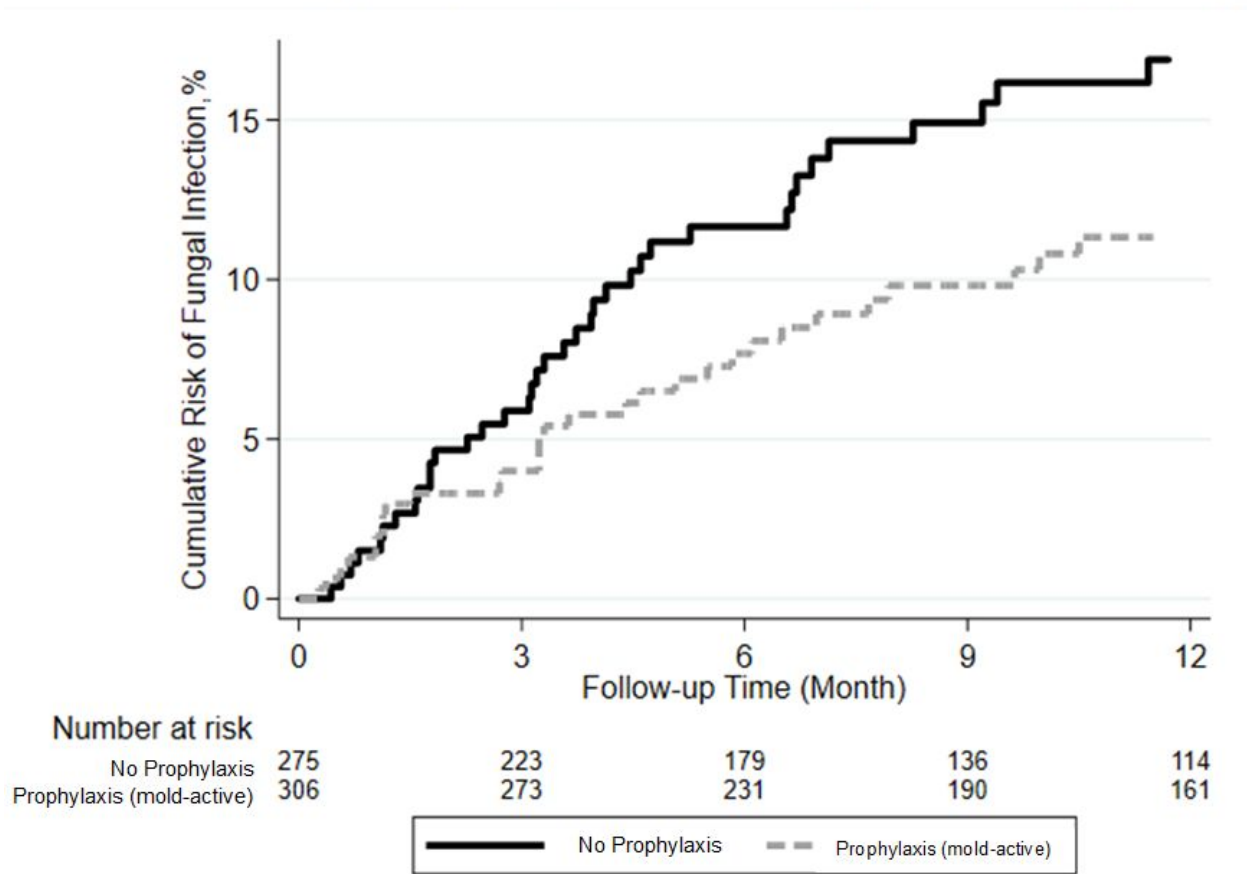**Online Data Supplement**

The Impact of Antifungal Prophylaxis in Lung Transplant Recipients

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Supplementary Figure 1: Cumulative risk for aspergillosis- or zygomycosis-specific fungal infections in lung transplant recipients receiving antifungal prophylaxis with a systemic mold-active agent compared to no antifungal prophylaxis.

	Events per 100 person-years		Hazard ratio (95% C.I.)	p-value
	No prophylaxis	Prophylaxis (mold-active)		
Fungal infection	20.53	13.05	0.65 (0.40, 1.05)	0.080

Number at risk

No Prophylaxis	275	223	179	136	114
Prophylaxis (mold-active)	306	273	231	190	161

Supplementary Table 1: Baseline characteristics of the matched cohort of patients receiving antifungal prophylaxis compared to patients receiving no prophylaxis. Age and Elixhauser score are presented as means with standard deviation parenthetically. The remainder is presented as the absolute number with percentage of the cohort indicated parenthetically.

	Unmatched (N=662)			1:1 Propensity-score matched (N=464)		
	Non-treated (N=275)	Treated (N=387)	Standardized Difference	Non-treated (N=232)	Treated (N=232)	Standardized Difference
Age	55.3 (13.4)	55.0 (12.7)	0.026	55.2 (13.3)	55.2 (12.6)	0.002
Sex						
Female	115 (41.8%)	162 (41.9%)	0.001	95 (40.9%)	90 (38.8%)	0.044
Male	160 (58.2%)	225 (58.1%)	0.001	137 (59.1%)	142 (61.2%)	0.044
Region						
Midwest	77 (28.0%)	85 (22.0%)	0.140	61 (26.3%)	66 (28.4%)	0.048
Northeast	41 (14.9%)	31 (8.0%)	0.218	28 (12.1%)	31 (13.4%)	0.039
South	140 (50.9%)	208 (53.7%)	0.057	126 (54.3%)	126 (54.3%)	0.000
West	17 (6.2%)	63 (16.3%)	0.324	17 (7.3%)	9 (3.9%)	0.150
Race/ethnicity						
Black	15 (5.5%)	21 (5.4%)	0.001	11 (4.7%)	15 (6.5%)	0.075
Hispanic	25 (9.1%)	23 (5.9%)	0.120	20 (8.6%)	17 (7.3%)	0.048
Other/unknown	52 (18.9%)	68 (17.6%)	0.035	41 (17.7%)	40 (17.2%)	0.011
White	183 (66.5%)	275 (71.1%)	0.098	160 (69.0%)	160 (69.0%)	0.000
Elixhauser score	3.6 (2.3)	3.6 (2.4)	0.014	3.6 (2.3)	3.5 (2.3)	0.013
Indication for transplant						
COPD & bronchiectasis	50 (18.2%)	82 (21.2%)	0.076	44 (21.0%)	41 (17.7%)	0.033
Cystic fibrosis	45 (16.4%)	51 (13.2%)	0.090	34 (13.1%)	31 (13.4%)	0.037
Idiopathic pulmonary fibrosis (IPF)	64 (23.3%)	95 (24.5%)	0.030	57 (24.6%)	55 (23.7%)	0.020
Non-IPF interstitial lung disease	101 (36.7%)	142 (36.7%)	0.001	87 (35.7%)	95 (40.9%)	0.071
Other indication (including PH)	15 (5.5%)	17 (4.4%)	0.049	10 (5.6%)	10 (4.3%)	0.000
Single vs double transplant						
Single transplant	84 (30.5%)	118 (30.5%)	0.001	69 (32.1%)	79 (34.1%)	0.093
Double transplant	191 (69.5%)	269 (69.5%)	0.001	163 (67.9%)	153 (65.9%)	0.093
Year of admission for transplant						
2005-2007	53 (19.3%)	54 (14.0%)	0.143	41 (16.3%)	46 (19.8%)	0.055
2008-2010	55 (20.0%)	55 (14.2%)	0.154	41 (17.9%)	49 (21.1%)	0.087
2011-2014	78 (28.4%)	101 (26.1%)	0.051	66 (27.8%)	66 (28.4%)	0.000
2015-2018	89 (32.4%)	177 (45.7%)	0.277	84 (38.1%)	71 (30.6%)	0.119

Abbreviations: COPD- Chronic Obstructive Pulmonary Disease, PH – Pulmonary Hypertension

Supplementary Table 2: Sensitivity analysis using propensity score matching to compare lung transplant recipients receiving antifungal prophylaxis versus those not receiving prophylaxis.

	Events per 100 person-years		HR (95% CI)	*p*-value
	No prophylaxis (N=252)	Prophylaxis (N=252)		
Mortality	18.14	9.65	0.54 (0.30, 0.95)	0.034
Fungal infection	23.81	13.16	0.56 (0.33, 0.94)	0.028

Supplementary Table 3: Falsification endpoint test in overlap-weighted cohort.

	Events per 100 person-years		HR (95% CI)	*p*-value
	No prophylaxis (N=312)	Prophylaxis (N=395)		
Myocardial Infarction	1.31	0.58	0.43 (0.12, 1.56)	0.201
Fracture	3.98	3.20	0.77 (0.41, 1.47)	0.432

Abbreviations: CI- confidence interval, HR- hazard ratio