

# Supplementary material

**Table S1.** Detailed overview of ISHLT classification and specification of causative pathogens identified

	Universal prophylaxis period, 2010-2016 (IA N=27)	Targeted prophylaxis period, 2016-2019 (IA N=15)
<b><i>ISHLT classification, n (%)</i></b>		
Proven pneumonia	4 (15)	3 (20)
Proven tracheobronchitis	4 (15)	0
Proven anastomosis infection	3 (11)	4 (27)
Probable pneumonia	11 (41)	4 (27)
Probable tracheobronchitis	5 (19)	1 (7)
Probable anastomosis infection	0	3 (20)
<b><i>Pathogens specified, n (%)</i></b>		
<i>Aspergillus fumigatus</i>	18 (67)	11 (73)
<i>Aspergillus niger</i>	2 (7)	0
Unspecified mold	1 (4)	2 (13)
<i>Aspergillus</i> species	3 (11)	0
<i>Aspergillus nidulans</i>	1 (4)	0
<i>Aspergillus unguis</i>	1 (4)	0
No pathogen specified	3 (11)	2 (13)

No pathogen was specified in some patients with a proven diagnosis where the diagnosis relied on histopathological findings exclusively.

Abbreviations: Universal antifungal prophylaxis period = Voriconazole three months following transplantation for all patients; Targeted antifungal prophylaxis = Posaconazole and inhaled liposomal amphotericin B three months following transplantation for high IA risk patients; IA = invasive aspergillosis; ISHLT = International Society for Heart and Lung Transplantation.

**Table S2.** Adjusted hazard ratios (aHR) of first *Aspergillus* event (colonization or invasive aspergillosis) in lung transplant recipients

	aHR (95% CI)
<b>Model 1</b>	
<b>Targeted prophylaxis time period, 2016-2019</b>	Ref.
<b>Universal prophylaxis time period, 2010-2016</b>	0.92 (0.58-1.48)
<b>Model 2</b>	
<b>Person time without antifungal prophylaxis</b>	Ref.
<b>Person time on antifungal prophylaxis</b>	0.50 (0.24-1.00)

Multivariable Cox models on invasive aspergillosis (IA), Model 1 and 2 included the following variables: Sex, age >50 years, *Aspergillus* pre-transplantation, high risk of IA, single lung transplantation and prophylaxis guideline period. Model 2 also included person time on prophylaxis as a time-updated variable.

**Figure S1.** Cumulative hazards of first *Aspergillus* event (colonization or invasive aspergillosis) the first year after lung transplantation in time periods with universal versus targeted prophylaxis

