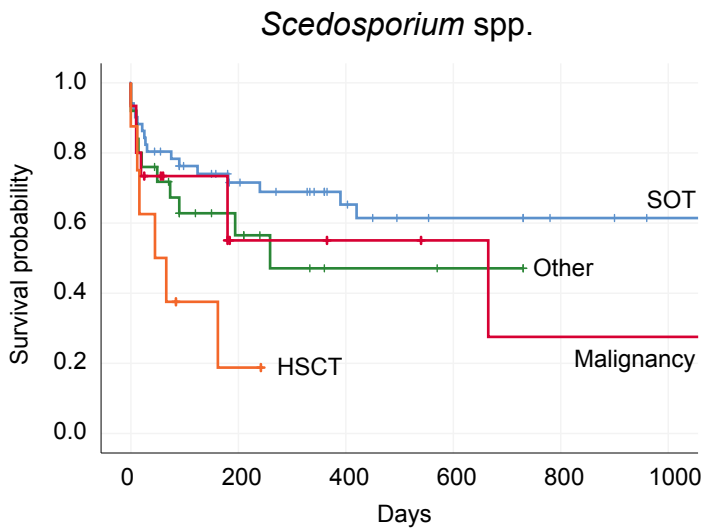
Supplementary Figure 1. Kaplan Meier curves for all cause death for immunocompromised patients with (A) *Scedosporium* spp. and (B) *L. prolificans* infection by predominant risk factor

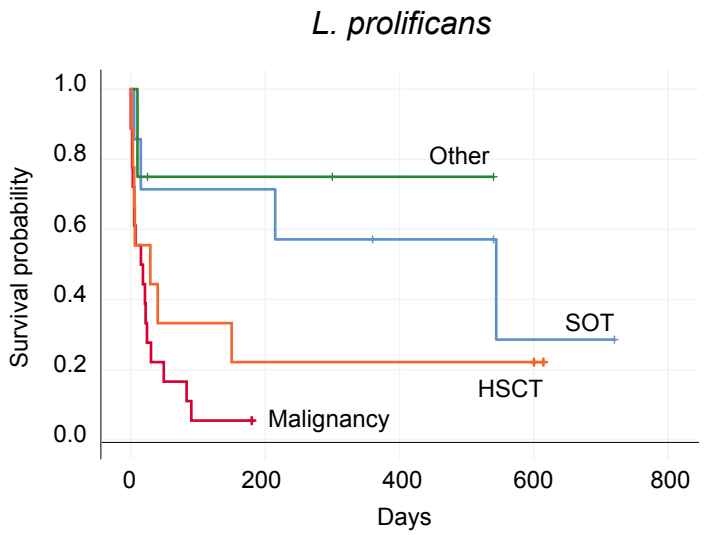
A



SOT (n=51, events=17)
Other (n=25, events=11)
Malignancy (n=15, events=7)
HSCT (n=8, events=6)

P Log rank	Malignancy	HSCT	Other
SOT	0.223	0.004	0.202
Malignancy		0.092	0.929
HSCT			0.080

B

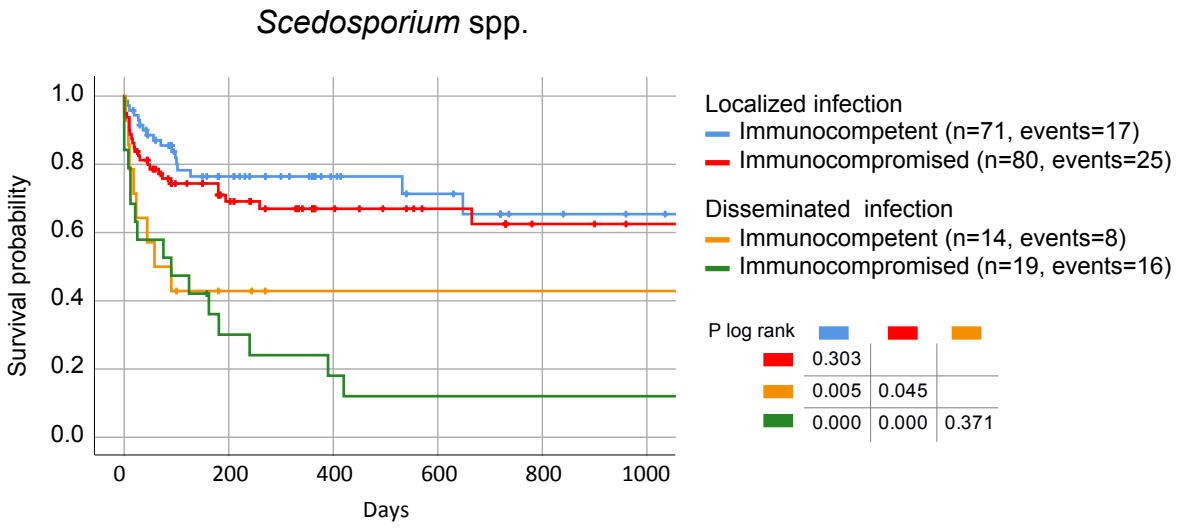


SOT (n=7, events=4)
Other (n=4, events=1)
Malignancy (n=18, events=17)
HSCT (n=9, events=7)

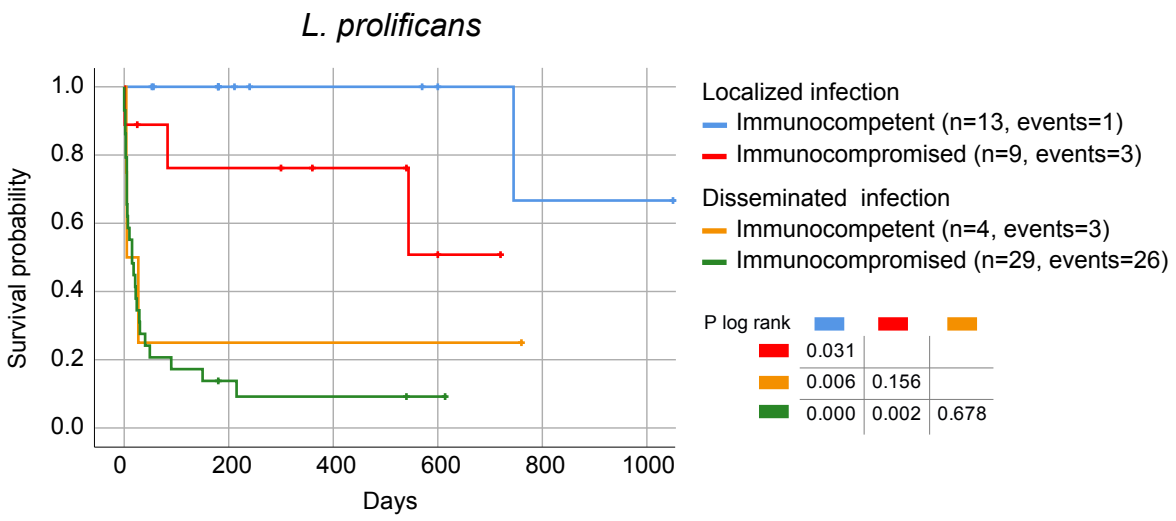
P Log rank	Malignancy	HSCT	Other
SOT	0.006	0.256	0.686
Malignancy		0.228	0.034
HSCT			0.166

Supplementary Figure 2. Kaplan Meier curves for all cause death for immunocompromised and immunocompetent patients with localized or disseminated *Scedosporium* spp. (A) and *L. prolificans* (B) infection

A

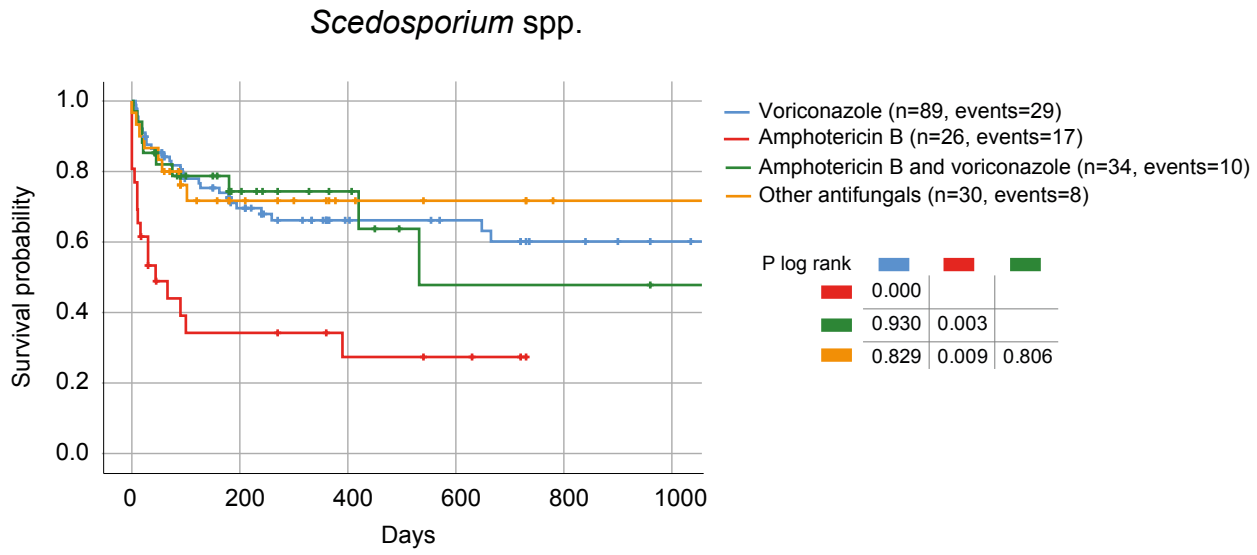


B

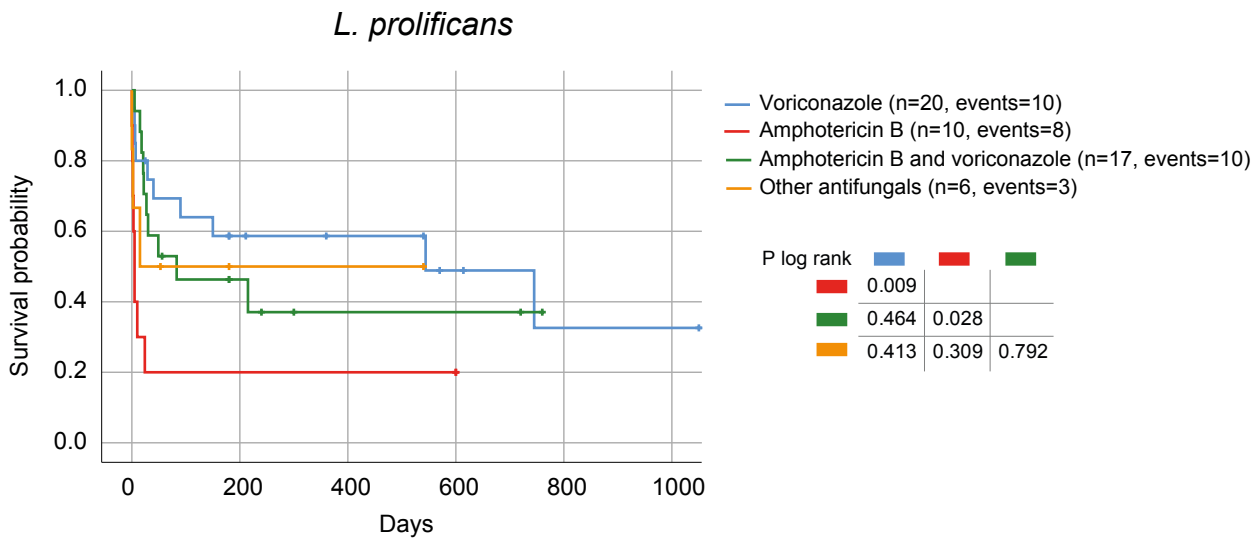


Supplementary Figure 3. Kaplan Meier survival curve for all cause death for (A) 179 patients with *Scedosporium* spp. infection and (B) 53 patients with *L. prolificans* infection treated with voriconazole, amphotericin B, amphotericin B plus voriconazole or other antifungals

A



B



Supplementary Table 1. Affected sites in disseminated *Scedosporium* spp. (n=46) and *L. prolificans* (n=33) infections

A. *Scedosporium* spp.

Risk factor	Case	Blood	CNS	Eye	Sinuses	Heart	Lung	Deep tissue	Skin	Bone/joint	Other
Solid organ transplantation	1	x	x			x	x				Liver, kidney, GI tract
	2	x	x			x					
	3	x	x								
	4	x							x		
	5	x				x				x	
	6	x				x	x		x		
	7		x	x					x		
	8		x	x					x		
	9		x						x		Testicle
	10		x								Testicle
	11		x			x	x				
	12		x				x		x		
	13		x				x		x		
	14			x	x		x		x	x	Mediastinum
	15			x			x			x	
	16			x							
	17			x							Kidney
	18						x			x	Mediastinum, pleurae
	19						x	x			Kidney
	20						x		x	x	
	21						x				(unknown)
	22					x				x	Spine
	23								x	x	
Malignancy	24	x	x				x				Liver
	25		x	x	x		x		x		
	26		x				x				
	27			x			x		x		
	28										
Longterm immunosuppression	29					x	x		x		Bone marrow, thyroid, kidney
	30						x		x		
	31								x		
Surgery	32	x	x			x	x		x		Kidney, thyroid, mycocard, pericard
	33	x				x	x			x	Liver, kidney
	34		x			x	x				
	35			x		x	x				
	36										
Trauma	37		x						x		
	38		x						x	x	
Near drowning	39		x				x				
	40		x				x				
	41			x			x			x	Lumbar vertebrae
	42			x			x				Lumbar vertebrae
Other immunocompetent	43	x	x	x							
	44		x	x							Kidneys, prosthetic aortic valve
Unknown	45	x	x		x						
	46	x							x		

B. *L. prolificans*

Risk factor	Case	Blood	Heart	CNS	Bone/joints	Skin	Lung	Deep tissue	Eye	Sinuses	Other
Solid organ transplantation	1	x	x	x							
	2		x				x		x		Kidney, jejunum
	3						x				
	4					x			x		
Malignancy	5	x	x	x			x		x		
	6	x	x	x			x				Liver
	7	x	x	x			x				
	8	x	x				x				Liver, kidney, pancreas, GI tract
	9	x				x	x				
	10	x					x				Kidney
	11	x					x				
	12	x					x				
	13	x	x						x		
	14	x				x			x		
	15	x							x		
	16	x							x		
	17	x								x	Basilar artery
	18	x									
	19	x									
	20	x									
	21	x									
	22	x									
	23	x									
	24	x									
	25	x									
	26		x				x				Kidney, myocard
	27			x			x		x		
	28				x					x	Spine, vessels
Longterm immunosuppression	29	x					x				
Surgery	30	x	x					x			
	31					x	x				Peritoneum
Trauma	32	x				x					
Other immunocompetent	33	x	x								

Supplementary Table 2. Antifungal drugs used for treatment of *Scedosporium* spp. (n=208) and *L. prolificans* (n=56) infections

	***Scedosporium* spp. (n=208)**	***L. prolificans* (n=56)**
Drugs administered first line (%)°[a]		
Amphotericin B	50 (24.5)	15 (27.3)
Voriconazole	87 (42.6)	25 (44.6)
Itraconazole	45 (22.1)	7 (12.7)
Other azoles	20 (9.8)	4 (7.3)
Echinocandin	8 (3.9)	9 (16.4)
Others	13 (6.4)	10 (18.2)
Monotherapy	102 (49)	16 (28.6)
Drugs used as monotherapy		
Amphotericin B	8 (7.8)	5 (31.3)
Voriconazole	61 (59.8)	5 (31.3)
Itraconazole	23 (23.5)	3 (18.8)
Other azole	5 (4.9)	-
Others	5 (4.9)	3 (18.8)
Consecutive monotherapy	53 (25.5)	10 (17.9)
Drugs administered first line in consecutive monotherapy		
Amphotericin B 1st line	22 (41.5)	2 (20)
Voriconazole 1st line	7 (13.2)	2 (20)
Itraconazole 1st line	14 (26.4)	1 (10)
Other azole 1st line	8 (15.1)	2 (20)
Echinocandin 1st line	2 (3.8)	3 (30)
1st line $X_{not\ VRC}$ → 2nd line voriconazole[b]	46 → 31 (67.4)	8 → 5 (62.5)
1st line $Y_{not\ AMB}$ → 2nd line amphotericin B[b]	31 → 5 (16.1)	8 → 4 (50)
Combination therapy	49 (23.6)	28 (50)
Drugs used for combination therapy (%)°[c]		
Voriconazole/Terbinafine[d]	17 (34.7)	18 (64.3)
Voriconazole/Amphotericin B[e]	12 (24.5)	6 (21.4)
Voriconazole/Other[f]	8 (16.3)	3 (10.7)
Amphotericin B/Other[g]	15 (30.6)	4 (14.3)
Other combination	4 (8.2)	4 (14.3)

° super-additive
[a] as part of first line combination therapy: Scedosporium spp.: amphotericin B (2), voriconazole (1), itraconazole (4), other azoles (3), echinocandin (1), others (8, all terbinafine); L. prolificans: amphotericin B (2), itraconazole (1), other azoles (1), echinocandin (1), others (10, all terbinafine)
[b] 1st line X/Y: amphotericin B (22), itraconazole (14), fluconazole (7), caspofungin (2), miconazole (1)
[c] incl. cases, for which second drug might have been added few days later
[d to g] Drugs used as second combination:
[d] Scedosporium spp.: second combi (2), L. prolificans (3)
[e] Scedosporium spp.: second combi (1), L. prolificans (1)
[f] Scedosporium spp.: second combi (2), L. prolificans (1)
[g] Scedosporium spp. (1), L. prolificans (2)

Supplementary Table 3. Mortality attributable to fungal infection for patients with *Scedosporium* spp. (n=50) and *L. prolificans* (n=13) infection

	***Scedosporium* spp. (n=50)**		***L. prolificans* (n=14)**	
Risk group	**attributable death/total**	**(%)**	**attributable death/total**	**(%)**
SOT	12/13	(92.3)	2/2	(100)
Malignancy	11/14	(78.6)	7/10	(70)
HSCT	5/6	(83.3)	2/4	(50)
Other[a]	2/6	(33.3)	-	-
Surgery	5/6	(83.3)	0/1	(0)
Trauma	0/1	(0)	-	-
Near drowning	0/1	(0)	-	-
Other[b]	6/7	(85.7)	1/1	(100)
Unknown	2/2	(100)	-	-

Supplementary Table 4. Univariate analysis for mortality in patients with *Scedosporium* spp. (A) and *L. prolificans* (B) infection

A. *Scedosporium* spp.

	SOT (n=51)				Malignancy (n=23)			
	cases	deaths	% deaths)	$p_{log\ rank}$	cases	deaths	% deaths)	$p_{log\ rank}$
Age				0.902				0.305
≤60	40	14	(35.0)		9	4	(44.5)	
>60	11	3	(27.3)		14	9	(64.3)	
Sex				0.697				0.493
Female	16	5	(31.3)		10	5	(50.0)	
Male	35	12	(34.3)		13	8	(61.6)	
HSCT								0.092
HSCT					8	6	(75.0)	
no HSCT					15	6	(40.0)	
CNS				0.004				0.753
CNS normal	38	9	(23.7)		18	10	(55.6)	
CNS infected	13	8	(61.6)		5	3	(60.0)	
Lung				0.151				0.004
Lung normal	40	11	(27.5)		11	4	(36.4)	
Lung infected	11	6	(54.6)		12	9	(75.0)	
Skin				0.346				0.277
Skin normal	32	12	(37.5)		18	11	(61.2)	
Skin infected	19	5	(26.4)		5	2	(40.0)	
Dissemination				0.000				0.215
Fungemia	6	6	(100)		1	1	(100.0)	
Localized disease	33	3	(9.1)	0.000	20	10	(50.0)	0.127
Disseminated†	12	8	(66.7)	0.005	2	2	(100.0)	0.528
Surgical intervention				0.382				0.284
Surgery for treatment	32	10	(31.3)		8	4	(50.0)	
No surgery	19	7	(36.9)		15	9	(60.0)	

† without positive blood cultures

B. *L. prolificans*

	Malignancy (n=27)			
	n	deaths	% deaths)	$p_{log\ rank}$
Age				0.789
≤60	14	12	(85.8)	
>60	13	12	(92.4)	
Sex				0.505
Female	12	11	(91.7)	
Male	15	13	(86.7)	
HSCT				0.228
HSCT	9	7	(77.8)	
no HSCT	18	17	(94.4)	
CNS				0.331
CNS normal	23	21	(91.4)	
CNS infected	4	3	(75.0)	
Lung				0.568
Lung normal	14	13	(92.9)	
Lung infected	13	11	(84.7)	
Skin				0.719
Skin normal	25	22	(88.0)	
Skin infected	2	2	(100.0)	
Dissemination				0.026
Fungemia	21	21	(100.0)	
Localized disease	3	2	(66.7)	0.127
Disseminated†	3	1	(33.4)	0.015
Surgical intervention				0.04
Surgery for treatment	4	2	(50.0)	
No surgery	23	22	(95.7)	

† without positive blood cultures