

Table S1. Fungal species isolated in adult CF patients with rare CFTR mutations in Qatar.

Isolated Fungus	Number of Colonized Patients (%)
<i>Candida</i>	18 (81.9)
<i>Albicans</i>	8 (44.4)
<i>Dubliniensis</i>	10 (55.6)
<i>Tropicalis</i>	2 (11.1)
<i>Parapsilosis</i>	1 (5.5)
Others	5 (27.8)
<i>Aspergillus</i>	10 (45.5)
<i>Fumigatus</i>	5 (50.0)
<i>Niger</i>	2 (20.0)
Other	4 (40.0)
Other Fungal species	2 (9.0)
Total	22 (70.9)

Table S2. Lung function against frequency of colonizing fungal species in adult CF patients in Qatar.

Number of Colonizing Fungal Species	Number of Infected Patients	ppFEV1 (%)	ppFVC (%)	Number of exacerbations
0	9	76	75	7
1	10	71	76	7
2	8	74	77.5	4
3	3	63	45	7
4	1	71	76	0

Table S3. Lung function against colonizing fungal species in adult CF patients in Qatar.

		Lung Function					
Fungal Colonization	Culture	ppFEV ₁	p-Value	ppFVC	p-Value	Exacerbations	p-Value
Fungal species	P* (22)	71.0 (78.0–63.0)	0.5	76.0 (81.5–66.5)	0.57	5.5 (0.0–11.0)	0.856
	A** (9)	76.0 (86.0–62.0)	00	75.0 (86.0–71.0)	0	7.0 (3.0–8.0)	
<i>Candida</i>	P (18)	71.0 (78.0–63.0)	0.6	73.0 (81.5–61.5)	0.18	5.5 (0.0–11.0)	0.976
	A (13)	71.0 (81.0–63.0)	01	79.0 (86.0–74.0)	0	7.0 (1.0–9.0)	
<i>Albicans</i>	P (8)	74.0 (82.5–49.0)	0.9	77.5 (87.5–51.5)	0.85	5.5 (0.5–11.5)	1.000
	A (23)	71.0 (81.0–63.0)	74	75.0 (84.0–71.0)	8	7.0 (0.0–9.0)	
<i>Dubliniensis</i>	P (10)	72.0 (81.0–67.0)	0.6	76.5 (83.5–70.0)	0.89	8.0 (3.0–11.0)	0.393
	A (21)	71.0 (80.0–62.0)	850	76.0 (86.0–69.0)	54	6.0 (0.0–9.0)	
<i>Tropicalis</i>	P (2)	52.5 (63.0–42.0)	0.1	54.0 (54.0–54.0)	0.27	3.5 (0.0–7.0)	0.520
	A (29)	71.0 (81.0–67.0)	12	76.0 (85.0–70.0)	6	7.0 (1.0–10.0)	

<i>Parapsilosis</i>	P	46.0 (46.0–46.0)	0.2	45.0 (45.0–45.0)	0.20	6.0 (6.0–6.0)	0.968
	A	71.0 (81.0–63.0)	58	76.0 (85.0–70.0)	7	7.0 (0.0–10.0)	
	(30)						
Other <i>Candida</i> species	P	71.0 (72.0–68.0)	0.9	73.0 (76.0–72.0)	0.58	3.0 (0.0–5.0)	0.390
	A	71.0 (81.0–62.0)	06	77.5 (86.0–68.5)	4	7.0 (1.0–10.0)	
	(26)						
<i>Aspergillus</i>	P	70.5 (71.0–63.0)	0.2	77.5 (79.5–67.0)	0.97	6.5 (0.0–10.0)	0.973
	A	73.0 (82.0–67.0)	28	74.0 (86.0–69.0)	2	7.0 (1.0–9.0)	
	(21)						
<i>Fumigatus</i>	P	71.0 (77.0–70.0)	0.9	79.0 (80.0–76.0)	0.74	1.0 (0.0–6.0)	0.254
	A	71.0 (81.0–63.0)	28	74.5 (85.0–68.5)	7	7.0 (1.0–10.0)	
	(26)						
<i>Niger</i>	P	61.5 (71.0–52.0)	0.4	67.0 (76.0–58.0)	0.46	1.0 (0.0–13.0)	0.719
	A	71.0 (81.0–63.0)	00	76.0 (86.0–69.0)	3	7.0 (0.5–9.5)	
	(29)						
Other <i>Aspergillus</i> species	P	67.0 (71.0–63.0)	0.3	77.5 (79.0–76.0)	0.82	8.0 (4.0–12.5)	0.363
	A	72.0 (81.0–62.0)	68	75.0 (86.0–68.0)	3	6.0 (0.0–10.0)	
	(27)						
Other species	P	71.0 (71.0–71.0)	0.9	76.0 (76.0–76.0)	1.00	4.5 (0.0–9.0)	0.714
	A	71.0 (81.0–63.0)	60	75.5 (85.0–68.5)	0	7.0 (1.0–10.0)	
	(29)						

* P stands for present

**A stands for absent.

Table S4. Patients with particularly low lung function in the CF population in Qatar, in order of mention.

Patient ID	Nationality	Genetics	Age	BMI	ppFE V1 (%)	ppFVC (%)	Exacerbations	Colonizing Fungal Species	Asthma	Pancreatic Insufficiency
1	non-Qatari	Heterozygous R553X (c.1657C>T and c.1115A>T))	23	17.0	19	43	1	<i>C. albicans</i>	Yes	Yes
2	Qatari	Heterozygous R553X (c.1657C>T and c.1115A>T))	28	25.4	46	45	6	<i>C. albicans</i> , <i>C. parapsilosis</i> <i>A. fumigatus</i>	No	Yes
3	Qatari	I1234V	26	22.1	42	54	0	<i>C. dubliniensis</i> <i>C. tropicalis</i>	No	Yes
4	Qatar	Homozygous (S307N(c.920G>A))	19	19.3	71	69	0	None	No	No
5	Qatari	Homozygous (S307N(c.920G>A))	22	26.5	82	84	3	<i>C. dubliniensis</i> other <i>C. sp.</i>	Yes	Yes

6	Qatari	Homozygous (S307N(c.920G>A))	2 0	32 .0	86	86	0	None	No	No
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