



Figure S1. A: Scatter plot of time to positivity (TTP) sorted by different *Candida* species used for simulated blood culture, ***: $p < 0.001$. B: Receiver operating characteristic curves proved that TTP is available to distinguish *C. tropicalis* from other *Candida* species in simulated blood culture.

Table S1 Clinical characteristics of 314 isolates for simulated blood cultures

Variables	<i>C. albicans</i> (n=161)	<i>C. parapsilosis</i> (n=33)	<i>C. glabrata</i> (n=53)	<i>C. tropicalis</i> (n=51)	other species (n=16)
Age, mean ± SD	66.1±15.6	63.3±12.4	68.5±16.6	69.3±10.9	59.6±16.4
Gender (male/female)	93/68	23/10	28/25	30/21	9/7
Specimen sources, n (%)					
Respiratory tract	114 (70.81%)	10 (30.30%)	18 (33.96%)	33 (64.71%)	7 (43.75%)
Urine	38 (23.60%)	8 (24.24%)	22 (41.51%)	7 (13.73%)	2 (12.50%)
Blood	2 (1.24%)	3 (9.09%)	2 (3.77%)	1 (1.96%)	1 (6.25%)
Hydrothorax	1 (0.62%)	0 (0)	1 (1.89%)	2 (3.92%)	0 (0)
Ascites	1 (0.62%)	4 (12.12%)	4 (7.55%)	3 (5.88%)	2 (12.50%)
Abscess	0 (0)	2 (6.06%)	3 (5.66%)	0 (0)	1 (6.25%)
Skin secretions	4 (2.48%)	5 (15.15%)	1 (1.89%)	5 (9.80%)	2 (12.50%)
Cerebrospinal fluid	1 (0.62%)	1 (3.03%)	0 (0)	0 (0)	1 (6.25%)
Susceptibility to antifungal agents (%)					
Amphotericin B	151 (93.79%) ^a	33 (100%) ^a	50 (94.34%) ^a	51 (100%) ^a	
5-fluorocytosine	152 (94.41%)	33 (100%)	53 (100%)	49 (96.08%)	
Fluconazole	143 (88.82%)	27 (81.82%)	39 (73.58%)	43 (84.31%)	
Voriconazole	147 (91.30%)	29 (87.88%)	46 (86.79%) ^a	45 (88.24%)	

SD: standard deviation; ^a: Epidemiologic cut-off values were applied according to CLSI M59-60^{23, 24}

Table S2 TTPs of different *Candida* species from 314 simulated blood cultures

Species	No (%) of positivity	Mean (SD) of TTP	Median (IQR) of TTP
<i>C. albicans</i>	161 (51.3)	25.41 (5.66)	25.20 (22.86-27.84)
<i>C. glabrata</i>	53 (16.9)	32.57 (5.77)	32.18 (28.98-36.36)
<i>C. parapsilosis</i>	33 (10.5)	28.59 (6.13)	27.23 (24.48-33.54)
<i>C. sake</i>	2 (0.6)	25.91 (3.47)	25.91 (23.45-28.36)
<i>C. krusei</i>	10 (3.2)	27.52 (5.62)	27.16 (21.92-32.62)
<i>C. lusitaniae</i>	4 (1.3)	26.47 (3.99)	25.40 (23.34-30.67)
<i>C. tropicalis</i>	51 (16.2)	18.32 (1.70)	18.17 (17.23-18.91)

TTP: Time to positivity; SD: standard deviation; IQR: Interquartile Range.

Table S3 TTPs from *Candida* species with different inoculation amounts

<i>Candida</i> species	TTP (mean \pm SD)			<i>p</i> value
	1000CFU	5000CFU	25000CFU	
<i>C. albicans</i>	25.88 \pm 0.76	24.48 \pm 0.72	23.50 \pm 0.52	0.06
<i>C. parapsilosis</i>	29.04 \pm 2.39	27.75 \pm 2.36	26.24 \pm 2.44	0.72
<i>C. glabrata</i>	35.44 \pm 1.97	33.61 \pm 2.03	32.67 \pm 2.13	0.47
<i>C. tropicalis</i>	19.33 \pm 0.66	18.2 \pm 0.60	17.2 \pm 0.56	0.11

TTP: Time to positivity; SD: standard deviation.

Table S4 Relationships between TTPs and resistance of *Candida* species to antifungal agents

Antifungal agents	<i>Candida</i> species	TTPs mean \pm SD		<i>p</i> value
		susceptible (n)	resistant (n)	
Amphotericin B	<i>C. albicans</i> ^a	25.43 \pm 0.47 (n=151)	25.06 \pm 1.33 (n=10)	0.84
	<i>C. parapsilosis</i> ^a	28.59 \pm 1.61 (n=33)	/	/
	<i>C. glabrata</i> ^a	32.61 \pm 0.82 (n=50)	31.80 \pm 0.93 (n=3)	0.82
	<i>C. tropicalis</i> ^a	18.32 \pm 0.47 (n=51)	/	/
5-fluorocytosine	<i>C. albicans</i>	25.59 \pm 0.46 (n=152)	25.27 \pm 1.47 (n=9)	0.09
	<i>C. parapsilosis</i>	28.59 \pm 1.61 (n=33)	/	/
	<i>C. glabrata</i>	32.57 \pm 0.79 (n=53)	/	/
	<i>C. tropicalis</i>	18.31 \pm 0.25 (n=49)	18.36 \pm 1.24 (n=2)	0.97
Fluconazole	<i>C. albicans</i>	25.29 \pm 0.47 (n=143)	26.28 \pm 1.41 (n=18)	0.49
	<i>C. parapsilosis</i>	28.31 \pm 1.20 (n=27)	29.83 \pm 2.47 (n=6)	0.59
	<i>C. glabrata</i>	33.15 \pm 0.99 (n=39)	30.95 \pm 1.09 (n=14)	0.24
	<i>C. tropicalis</i>	18.27 \pm 0.27 (n=43)	19.35 \pm 0.86 (n=8)	0.14
Voriconazole	<i>C. albicans</i>	25.35 \pm 0.49 (n=147)	26.00 \pm 0.66 (n=14)	0.68
	<i>C. parapsilosis</i>	28.66 \pm 1.13 (n=29)	28.11 \pm 3.65 (n=4)	0.87
	<i>C. glabrata</i> ^a	32.17 \pm 0.82 (n=46)	35.15 \pm 2.55 (n=7)	0.21
	<i>C. tropicalis</i>	18.30 \pm 0.23 (n=45)	18.45 \pm 1.12 (n=6)	0.84

TTP: Time to positivity; SD: standard deviation; ^a: Epidemiologic cut-off values were applied according to CLSI M59-60^{23, 24}