

Supplementary Materials

Table S1. True/false questions on *Talaromyces marneffe* and answers provided by chatbots.

Question number	Statement	Correct answer	Answer by chatbots							
			GPT-4o mini	GPT-4o	Perplexity	Perplexity Pro	Claude 3.5 Sonnet	Claude 3 Opus	Copilot	Gemini
<i>Taxonomy and basic mycology</i>										
1	<i>Penicillium marneffe</i> was reclassified as <i>Talaromyces marneffe</i> because of DNA sequence analysis.	T	T	T	T	T	T	T	T	T
2	<i>Talaromyces marneffe</i> is a medically important thermal dimorphic fungus.	T	T	T	T	T	T	T	T	T
3	Phylogenetically, <i>Talaromyces marneffe</i> is more closely related to <i>Candida albicans</i> than <i>Aspergillus fumigatus</i> .	F	F	F	T	F	F	F	F	F
4	Mitochondrial genome sequencing is extremely useful for classification of <i>Talaromyces marneffe</i> .	T	T	T	T	T	T	T	F	T
5	<i>Talaromyces marneffe</i> has been proved to be a fungus without sexual stage.	F	F	F	T	T	F	F	F	F
6	Phylogenetically, <i>Talaromyces marneffe</i> is more closely related to the other thermal dimorphic fungi than the <i>Aspergillus</i> species.	F	T	T	T	T	T	T	T	T
7	There are two subspecies of <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	F	F
8	In the phenotypic classification system, <i>Talaromyces marneffe</i> is considered as a black mould.	F	F	F	T	F	F	F	F	F
9	A small dose of <i>Talaromyces marneffe</i> (10 viable fungal spores) can kill a mouse in 10 days.	F	F	F	T	T	F	F	T	F
10	Invertebrate animal model is available for <i>Talaromyces marneffe</i> .	T	T	T	T	T	T	T	T	T
11	Mplp is a virulence factor of <i>Talaromyces marneffe</i> .	T	T	T	T	T	T	T	T	T

12	The diffusible red pigment of <i>Talaromyces marneffe</i> consists of a mixture of more than 10 compounds.	T	F	T	T	T	F	T	F	F
13	Mycoviruses have never been observed in <i>Talaromyces marneffe</i> .	F	F	F	F	T	F	F	T	F
14	<i>Talaromyces marneffe</i> has more than 30 polyketide synthases.	F	F	T	T	T	F	F	F	T
15	Polyketide synthases are responsible for red pigment production in <i>Talaromyces marneffe</i> .	T	F	T	T	T	T	T	T	T
16	The genome of <i>Talaromyces marneffe</i> encodes more than 10 Mplp homologues.	T	T	T	T	T	F	T	F	T
17	<i>Talaromyces marneffe</i> infects the reticuloendothelial system.	T	T	T	T	T	T	T	T	T
18	Primates provide the only animal model for the study of <i>Talaromyces marneffe</i> infections.	F	F	F	F	F	F	F	F	F
19	Hamsters have been shown to be a useful animal model for the study of <i>Talaromyces marneffe</i> pathogenesis.	F	T	T	T	T	T	T	T	T
20	<i>Talaromyces marneffe</i> multiplies as rapidly as <i>Candida albicans</i> .	F	F	F	F	F	F	F	F	F
21	The genome size of <i>Talaromyces marneffe</i> is at least 10 times larger than that of <i>Aspergillus nidulans</i> .	F	F	F	F	F	F	F	F	F
22	Polyketide synthases are responsible for yellow pigment production in <i>Talaromyces marneffe</i> .	T	F	F	F	F	F	F	F	F
23	Herqueinone is the chemical compound that makes up the red pigment of <i>Talaromyces marneffe</i> .	F	F	F	T	F	F	F	F	F
24	The genome of <i>Talaromyces marneffe</i> consists of one circular DNA.	F	F	F	F	F	F	F	F	F
25	<i>Talaromyces marneffe</i> causes an infection in monkeys with clinical features similar to that in human.	F	T	T	T	T	T	T	T	T
<i>Epidemiology and clinical disease</i>										
26	<i>Talaromyces marneffe</i> infection is strongly associated with HIV/AIDS.	T	T	T	T	T	T	T	T	T

27	More than 10 cases of <i>Talaromyces marneffe</i> infections in renal transplant recipients have been reported in the literature.	T	T	T	T	T	T	T	T	T
28	<i>Talaromyces marneffe</i> infection is endemic in the USA.	F	F	F	F	F	F	F	F	F
29	<i>Talaromyces marneffe</i> infection is endemic in Taiwan.	T	F	F	T	T	T	T	T	T
30	Chinese bamboo rats are the only reservoir of <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	F	F
31	<i>Talaromyces marneffe</i> can be occasionally transmitted through the oral route.	F	T	T	F	T	F	F	T	T
32	Since <i>Talaromyces marneffe</i> exists as the yeast form at 37°C, transmission of <i>Talaromyces marneffe</i> mainly relies on its yeast form.	F	F	T	T	F	F	F	F	T
33	<i>Talaromyces marneffe</i> infection can be a sexually transmitted disease.	F	F	F	F	F	F	F	F	F
34	Splenectomy is a risk factor for <i>Talaromyces marneffe</i> infection.	F	T	T	T	T	T	T	T	T
35	<i>Talaromyces marneffe</i> infection has never been reported in bone marrow transplant recipient.	F	F	F	F	F	F	F	F	F
36	<i>Talaromyces marneffe</i> infection has been reported in Assam and Bihar of India.	T	T	T	T	T	T	T	T	T
37	<i>Talaromyces marneffe</i> can very rarely be transmitted by mosquitos.	F	F	F	F	F	F	F	F	F
38	Outbreaks of <i>Talaromyces marneffe</i> infection sometimes occur after heavy rain and flooding.	F	T	T	T	T	F	F	T	T
39	Young children are more susceptible to <i>Talaromyces marneffe</i> infections than adults.	F	T	T	F	F	F	F	T	T
40	Males are more susceptible to <i>Talaromyces marneffe</i> infections than females.	F	F	T	T	T	F	F	T	F
41	<i>Talaromyces marneffe</i> has been reported to be transmitted through blood transfusion.	F	F	T	F	F	F	F	F	T
42	When presents as acute sepsis, <i>Talaromyces marneffe</i> infection often kills a patient within five days.	F	F	F	T	T	T	F	F	F
43	<i>Talaromyces marneffe</i> infection is often misdiagnosed as tuberculosis.	T	T	T	T	T	T	T	T	T

44	<i>Talaromyces marneffe</i> i infection typically presents as acute onset of fever.	F	T	T	T	T	T	T	T	T
45	<i>Talaromyces marneffe</i> i infection usually presents as chronic diarrhea.	F	F	F	F	F	F	F	F	F
46	<i>Talaromyces marneffe</i> i never infects the central nervous system.	F	F	F	F	F	F	F	F	F
47	<i>Talaromyces marneffe</i> i infection is often associated with pulmonary infiltrates.	T	T	T	T	T	T	T	T	T
48	<i>Talaromyces marneffe</i> i infection is an AIDS-defining condition.	T	T	T	T	T	T	T	T	T
49	Talaromycosis is often used interchangeably with penicilliosis.	T	T	T	T	T	T	T	T	F
50	Recent use of antibiotics is an important risk factor for <i>Talaromyces marneffe</i> i infection.	F	T	T	F	F	F	F	F	T
<i>Laboratory diagnosis</i>										
51	Diffusible red pigment produced by the yeast form of <i>Talaromyces marneffe</i> i is a feature for laboratory diagnosis of <i>Talaromyces marneffe</i> i infection.	F	T	T	T	F	F	F	T	T
52	Next-generation sequencing is a technique for rapid laboratory diagnosis of <i>Talaromyces marneffe</i> i infection.	T	T	T	T	T	T	T	T	T
53	Isolation of <i>Talaromyces marneffe</i> i from clinical samples usually require less than two days.	F	F	T	F	F	T	T	F	F
54	Isolation of <i>Talaromyces marneffe</i> i from blood sample is extremely difficult.	F	F	T	T	F	F	F	T	T
55	<i>Talaromyces marneffe</i> i yeast cells have been observed by direct microscopic examination of bone marrow biopsy samples.	T	T	T	T	T	T	T	T	T
56	Indian ink is the special stain of choice for <i>Talaromyces marneffe</i> i.	F	F	F	F	F	F	F	F	F
57	Immunofluorescence test is commercially available for laboratory diagnosis of <i>Talaromyces marneffe</i> i infection.	F	F	T	F	F	T	T	F	T

58	Both antigen and antibody testing can be performed for laboratory diagnosis of <i>Talaromyces marneffe</i> infection.	T	T	T	T	T	T	T	T	T
59	Antifungal susceptibility testing should be routinely performed for all cases of <i>Talaromyces marneffe</i> infection.	F	F	T	F	F	T	T	T	T
60	Patients with <i>Talaromyces marneffe</i> infection are sometimes positive for galactomannan antigen test.	T	T	T	F	T	F	F	T	F
61	Mp1p is a useful marker for molecular typing of <i>Talaromyces marneffe</i> strains.	T	T	T	T	T	T	T	T	T
62	PCR for the diagnosis of <i>Talaromyces marneffe</i> infection is impossible because the genome of <i>Talaromyces marneffe</i> is too unstable.	F	F	F	F	F	F	F	F	F
63	Budding can be observed for the yeast form of <i>Talaromyces marneffe</i> .	F	T	T	T	T	T	T	T	T
64	Diffusible red pigment is only produced by <i>Talaromyces marneffe</i> , but no other fungal organisms.	F	F	F	F	F	F	F	F	F
65	Culture and identification of <i>Talaromyces marneffe</i> is unreliable in non-endemic areas.	F	F	F	T	F	F	F	F	F
66	Around 30% of <i>Talaromyces marneffe</i> does not produce red pigment.	F	T	T	F	F	F	F	F	F
67	Antifungal susceptibility testing using MIC test strips is unreliable for <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	F	F
68	PCR sequencing of antifungal resistance genes is a commonly used method for rapid detection of antifungal resistance in <i>Talaromyces marneffe</i> .	F	T	T	F	F	F	T	T	T
69	<i>Talaromyces marneffe</i> is able to grow on Sabouraud dextrose agar.	T	T	T	T	T	T	T	T	T
70	The yeast form of <i>Talaromyces marneffe</i> is able to grow on horse blood agar, but not sheep blood agar.	F	F	F	F	F	F	F	F	T
71	Western blot has been demonstrated to be a reliable method for antifungal susceptibility testing in <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	F	F

72	MALDI-TOF MS is unreliable for identification of <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	T	F
73	Commercial biochemical reaction kits such as API and Vitek are not useful for identification of <i>Talaromyces marneffe</i> .	T	T	T	F	T	T	T	T	F
74	Thermal dimorphism is an important feature for laboratory identification of <i>Talaromyces marneffe</i> .	T	T	T	T	T	T	T	T	T
75	Azole resistance for <i>Talaromyces marneffe</i> is difficult to detect in the laboratory.	F	T	T	F	F	F	T	T	F
<i>Treatment and prevention</i>										
76	The standard treatment for <i>Talaromyces marneffe</i> infection is intravenous amphotericin B followed by fluconazole maintenance.	F	T	F	T	F	F	F	F	T
77	Itraconazole should not be used for <i>Talaromyces marneffe</i> infection with central nervous system involvement.	T	T	T	T	F	F	F	T	T
78	Fluconazole can be used for the treatment of <i>Talaromyces marneffe</i> infection.	F	T	F	T	T	F	F	F	T
79	Voriconazole can be used for the treatment of <i>Talaromyces marneffe</i> infection.	T	T	T	T	T	T	T	T	T
80	<i>Talaromyces marneffe</i> is susceptible to both amphotericin B and posaconazole.	T	T	T	T	T	T	T	T	T
81	Liposomal amphotericin B is not useful for the treatment of <i>Talaromyces marneffe</i> infection.	F	F	F	F	F	F	F	F	F
82	Monoclonal antibodies are proven to be effective for the treatment of <i>Talaromyces marneffe</i> infection.	F	F	F	F	F	F	F	F	F
83	Echinocandins are not useful for the treatment of <i>Talaromyces marneffe</i> infection.	T	T	F	T	T	T	T	F	F
84	Even with appropriate antifungal treatment, the mortality rate of <i>Talaromyces marneffe</i> infection is still more than 30%.	F	T	T	T	F	F	T	T	T
85	Antifungal resistance is an emerging problem for treatment of <i>Talaromyces marneffe</i> infection.	F	T	T	T	T	F	T	T	T

86	Horizontal transmission of antifungal resistance genes has never been reported in <i>Talaromyces marneffe</i> .	T	F	T	T	T	T	T	T	F
87	Antifungal resistance in <i>Talaromyces marneffe</i> is mediated by a group of more than ten genes in the <i>Talaromyces marneffe</i> genome.	F	T	T	T	F	F	F	F	T
88	Antifungal cream is not useful for the treatment of <i>Talaromyces marneffe</i> skin infection.	T	T	T	T	F	F	F	T	F
89	Treatment of the underlying HIV infection by anti-retroviral therapy is important for long-term control of <i>Talaromyces marneffe</i> infection.	T	T	T	T	T	T	T	T	T
90	Detection of antifungal resistance in <i>Talaromyces marneffe</i> can be achieved by MALDI-TOF MS.	F	F	F	F	F	F	F	F	F
91	The incidence of fluconazole resistance in <i>Talaromyces marneffe</i> is similar in Asia, Europe and America.	T	F	F	F	F	F	F	F	F
92	Recombinant protein vaccination is extremely effective for prevention of <i>Talaromyces marneffe</i> infection.	F	F	F	F	F	F	F	F	F
93	mRNA vaccination is extremely effective for prevention of <i>Talaromyces marneffe</i> infection.	F	F	F	F	F	F	F	F	F
94	Travel of HIV-positive patients to Southeast Asia is not recommended because of the high risk of <i>Talaromyces marneffe</i> infection.	F	F	T	T	F	F	F	T	T
95	Sexual transmission of <i>Talaromyces marneffe</i> can be prevented by using condoms.	F	F	F	T	F	F	F	F	F
96	No commercially available vaccine is available for <i>Talaromyces marneffe</i> .	T	T	T	T	T	T	T	T	T
97	<i>Talaromyces marneffe</i> infection in bone marrow transplant recipients can be prevented by oral fluconazole prophylaxis.	F	T	F	T	F	F	F	T	T
98	Prevention of infections caused by <i>Talaromyces marneffe</i> is much easier than infection caused by other <i>Talaromyces</i> species.	F	F	F	F	F	F	F	F	F
99	Since the spores of <i>Talaromyces marneffe</i> can be filtered by the HEPA filter, the HEPA filter	F	T	T	T	T	T	T	T	T

	is extremely important for prevention of <i>Talaromyces marneffe</i> i infections in bone marrow transplant recipients.									
100	Prevention of <i>Talaromyces marneffe</i> i infections can be achieved by not hospitalizing immunocompromised patients in hospitals with construction work.	F	T	T	T	T	T	T	T	T

Table S2. True/false questions on *Aspergillus fumigatus* and answers provided by chatbots.

Question number	Statement	Correct answer	Answer by chatbots							
			GPT-4o mini	GPT-4o	Perplexity	Perplexity Pro	Claude 3.5 Sonnet	Claude 3 Opus	Copilot	Gemini
Taxonomy and basic mycology										
1	<i>Aspergillus fumigatus</i> is reclassified as <i>Neosartorya fumigata</i> because of DNA sequence analysis.	F	F	F	F	F	F	F	F	T
2	<i>Aspergillus fumigatus</i> is a medically important thermal dimorphic fungus.	F	T	T	F	F	F	T	T	T
3	Phylogenetically, <i>Aspergillus fumigatus</i> is more closely related to <i>Candida albicans</i> than <i>Talaromyces marneffe</i> .	F	F	F	F	F	F	F	F	F
4	Mitochondrial genome sequencing is extremely useful for classification of <i>Aspergillus fumigatus</i> .	T	T	T	T	F	T	T	T	T
5	<i>Aspergillus fumigatus</i> has been proved to be a fungus without sexual stage.	F	F	F	T	F	F	F	F	F
6	Phylogenetically, <i>Aspergillus fumigatus</i> is more closely related to thermal dimorphic fungi than <i>Penicillium</i> species.	F	F	F	T	F	F	F	F	T
7	There are two subspecies of <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F
8	In the phenotypic classification system, <i>Aspergillus fumigatus</i> is considered as a black mold.	F	F	F	F	F	F	F	F	T
9	A small dose of <i>Aspergillus fumigatus</i> (10 viable fungal spores) can kill a mouse in 10 days.	F	F	F	T	F	F	F	T	F
10	Invertebrate animal model is available for <i>Aspergillus fumigatus</i> .	T	T	T	T	T	T	T	T	T
11	Afmp1p is the predominant virulence factor of <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	T
12	The diffusible red pigment of <i>Aspergillus fumigatus</i> consists of a mixture of more than 10 compounds.	F	F	F	T	F	F	T	F	T
13	Mycoviruses have never been observed in <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F

14	<i>Aspergillus fumigatus</i> has more than 30 polyketide synthases.	F	T	T	T	T	T	T	T	T
15	Polyketide synthases are responsible for red pigment production in <i>Aspergillus fumigatus</i> .	F	F	F	T	T	F	T	F	T
16	The genome of <i>Aspergillus fumigatus</i> encodes more than 10 Afmp1p homologues.	F	T	T	F	F	F	T	T	T
17	<i>Aspergillus fumigatus</i> infects the reticuloendothelial system.	F	T	T	F	F	F	F	T	T
18	Primates provide the only animal model for the study of <i>Aspergillus fumigatus</i> infections.	F	F	F	F	F	F	F	F	F
19	Hamsters have been shown to be a useful animal model for the study of <i>Aspergillus fumigatus</i> pathogenesis.	F	T	T	T	T	T	T	T	T
20	<i>Aspergillus fumigatus</i> multiplies as rapidly as <i>Candida albicans</i> .	F	F	F	F	F	F	F	F	F
21	The genome size of <i>Aspergillus fumigatus</i> is at least 10 times larger than that of <i>Aspergillus nidulans</i> .	F	F	F	F	F	F	F	F	F
22	Polyketide synthases are responsible for red pigment production in <i>Aspergillus fumigatus</i> .	F	F	F	T	T	F	T	F	T
23	Herqueinone is the chemical compound that makes up the red pigment of <i>Aspergillus fumigatus</i> .	F	F	F	T	F	F	F	F	F
24	The genome of <i>Aspergillus fumigatus</i> consists of one circular DNA	F	F	F	F	F	F	F	F	F
25	<i>Aspergillus fumigatus</i> causes an infection in monkeys with clinical features similar to that in human.	F	T	T	T	T	T	T	T	T
<i>Epidemiology and clinical disease</i>										
26	<i>Aspergillus fumigatus</i> infection is strongly associated with HIV/AIDS.	T	F	F	T	F	F	F	F	T
27	More than 10 cases of <i>Aspergillus fumigatus</i> infections in renal transplant recipients have been reported in the literature.	T	T	T	T	T	T	T	T	T
28	<i>Aspergillus fumigatus</i> infection is endemic in the USA.	T	F	F	F	F	F	F	F	T

29	<i>Aspergillus fumigatus</i> infection is endemic in Taiwan.	T	F	F	T	F	F	F	F	T
30	Chinese bamboo rats are the only reservoir of <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F
31	<i>Aspergillus fumigatus</i> can be occasionally transmitted through the sexual route.	F	F	F	F	F	F	F	F	F
32	Since <i>Aspergillus fumigatus</i> exists as the yeast form at 37°C, transmission of <i>Aspergillus fumigatus</i> mainly relies on its yeast form.	F	F	F	F	F	F	F	F	F
33	<i>Aspergillus fumigatus</i> infection can be a sexually transmitted disease.	F	F	F	F	F	F	F	F	F
34	Splenectomy is a risk factor for <i>Aspergillus fumigatus</i> infection.	F	T	T	T	T	T	T	T	T
35	<i>Aspergillus fumigatus</i> infection has never been reported in bone marrow transplant recipient.	F	F	F	F	F	F	F	F	F
36	<i>Aspergillus fumigatus</i> infection has been reported in Assam and Bihar of India.	T	T	T	T	T	F	F	T	T
37	<i>Aspergillus fumigatus</i> can very rarely be transmitted by mosquitos.	F	F	F	F	F	F	F	F	F
38	Outbreaks of <i>Aspergillus fumigatus</i> infection sometimes occur after heavy rain and flooding.	F	T	T	T	F	F	F	T	T
39	Young children are more susceptible to <i>Aspergillus fumigatus</i> infections than adults.	F	F	T	T	F	F	F	T	T
40	Males are more susceptible to <i>Aspergillus fumigatus</i> infections than females.	F	F	T	F	F	F	F	F	F
41	<i>Aspergillus fumigatus</i> has been reported to be transmitted through blood transfusion.	F	F	T	T	F	F	F	F	T
42	When presents as acute sepsis, <i>Aspergillus fumigatus</i> infection often kills a patient within one day.	F	F	F	T	F	F	F	F	F
43	<i>Aspergillus fumigatus</i> infection is often misdiagnosed as tuberculosis.	F	T	T	T	F	T	T	T	T
44	<i>Aspergillus fumigatus</i> infection typically presents as acute onset of fever.	F	T	T	T	F	T	F	T	T
45	<i>Aspergillus fumigatus</i> infection usually presents as chronic diarrhea.	F	F	F	F	F	F	F	F	F
46	<i>Aspergillus fumigatus</i> never infects the central nervous system.	F	F	F	F	F	F	F	F	F

47	<i>Aspergillus fumigatus</i> infection is often associated with pulmonary infiltrates.	T	T	T	T	T	T	T	T	T
48	<i>Aspergillus fumigatus</i> infection is an AIDS-defining condition.	F	F	F	T	F	F	F	F	T
49	Aspergillosis is often used interchangeably with penicilliosis.	F	F	F	F	F	F	F	F	F
50	Recent use of antibiotics is an important risk factor for <i>Aspergillus fumigatus</i> infection.	F	T	T	T	T	T	T	T	T
<i>Laboratory diagnosis</i>										
51	Diffusible red pigment produced by <i>Aspergillus fumigatus</i> is a feature for laboratory diagnosis of <i>Aspergillus fumigatus</i> infection.	F	F	F	T	F	F	T	F	T
52	Next-generation sequencing is a technique for rapid laboratory diagnosis of <i>Aspergillus fumigatus</i> infection.	T	T	T	T	T	T	T	T	T
53	Isolation of <i>Aspergillus fumigatus</i> from clinical samples usually require less than two days.	F	T	T	F	F	F	T	F	F
54	Isolation of <i>Aspergillus fumigatus</i> from blood sample is extremely difficult.	T	T	T	T	T	T	T	T	T
55	<i>Aspergillus fumigatus</i> yeast cells have been observed by direct microscopic examination of bone marrow biopsy samples.	F	F	F	T	F	F	F	F	T
56	Indian ink is the special stain of choice for <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F
57	Immunofluorescence test is commercially available for laboratory diagnosis of <i>Aspergillus fumigatus</i> infection.	F	T	T	T	F	T	T	T	T
58	Both antigen and antibody testing can be performed for laboratory diagnosis of <i>Aspergillus fumigatus</i> infection.	T	T	T	T	T	T	T	T	T
59	Antifungal susceptibility testing should be routinely performed for all cases of <i>Aspergillus fumigatus</i> infection.	F	T	T	T	F	T	T	T	T
60	Patients with <i>Aspergillus fumigatus</i> infection are sometimes positive for galactomannan antigen test.	T	T	T	T	T	T	T	T	T

61	Afmp1p is a useful marker for molecular typing of <i>Aspergillus fumigatus</i> strains.	F	T	T	F	F	F	T	F	T
62	PCR for the diagnosis of <i>Aspergillus fumigatus</i> infection is impossible because the genome of <i>Aspergillus fumigatus</i> is too unstable.	F	F	F	F	F	F	F	F	F
63	Budding can be observed for the yeast form of <i>Aspergillus fumigatus</i> .	F	F	F	T	F	F	F	F	T
64	Diffusible red pigment is only produced by <i>Aspergillus fumigatus</i> , but no other <i>Aspergillus</i> species.	F	F	F	F	F	F	F	F	F
65	Culture and identification of <i>Aspergillus fumigatus</i> is unreliable in non-endemic areas.	F	F	F	T	F	F	F	F	F
66	Around 30% of <i>Aspergillus fumigatus</i> does not produce red pigment.	F	F	T	T	F	F	F	F	T
67	Antifungal susceptibility testing using MIC test strips is unreliable for <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F
68	PCR sequencing of antifungal resistance genes is a commonly used method for rapid detection of antifungal resistance in <i>Aspergillus fumigatus</i> .	F	T	T	T	T	T	T	T	T
69	<i>Aspergillus fumigatus</i> is able to grow on Sabouraud dextrose agar.	T	T	T	T	T	T	T	T	T
70	<i>Aspergillus fumigatus</i> is able to grow on horse blood agar, but not sheep blood agar.	F	F	F	F	F	F	F	T	F
71	Western blot has been demonstrated to be a reliable method for antifungal susceptibility testing in <i>Aspergillus fumigatus</i> .	F	F	F	T	F	F	F	F	F
72	MALDI-TOF MS is unreliable for identification of <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	T	F
73	Commercial biochemical reaction kits such as API and Vitek are not useful for identification of <i>Aspergillus fumigatus</i> .	T	T	T	F	T	T	T	T	F
74	Thermal dimorphism is an important feature for laboratory identification of <i>Aspergillus fumigatus</i> .	F	F	F	F	F	F	F	F	F
75	Azole resistance for <i>Aspergillus fumigatus</i> is difficult to detect in the laboratory.	F	T	T	T	F	F	T	T	F
Treatment and prevention										

76	The standard treatment for <i>Aspergillus fumigatus</i> infection is intravenous amphotericin B followed by fluconazole maintenance.	F	F	F	F	F	F	F	F	F
77	Itraconazole should not be used for <i>Aspergillus fumigatus</i> infection with central nervous system involvement.	T	T	T	T	F	F	F	T	T
78	Fluconazole can be used for the treatment of <i>Aspergillus fumigatus</i> infection.	F	F	F	F	F	F	F	F	T
79	Voriconazole can be used for the treatment of <i>Aspergillus fumigatus</i> infection.	T	T	T	T	T	T	T	T	T
80	<i>Aspergillus fumigatus</i> is susceptible to both amphotericin B and posaconazole.	T	T	T	T	T	T	T	T	T
81	Liposomal amphotericin B is not useful for the treatment of <i>Aspergillus fumigatus</i> infection.	F	F	F	F	F	F	F	F	F
82	Monoclonal antibodies are proven to be effective for the treatment of <i>Aspergillus fumigatus</i> infection.	F	F	F	F	F	F	F	F	F
83	Echinocandins are not useful for the treatment of <i>Aspergillus fumigatus</i> infection.	F	F	F	T	F	F	F	F	F
84	Even with appropriate antifungal treatment, the mortality rate of invasive <i>Aspergillus fumigatus</i> infection is still more than 30%.	T	T	T	T	T	T	T	T	T
85	Antifungal resistance is an emerging problem for treatment of <i>Aspergillus fumigatus</i> infection.	T	T	T	T	T	T	T	T	T
86	Horizontal transmission of antifungal resistance genes carried by mycovirus has never been reported in <i>Aspergillus fumigatus</i> .	T	T	T	T	T	T	T	T	F
87	Antifungal resistance in <i>Aspergillus fumigatus</i> is mediated by a group of more than ten genes in the <i>Aspergillus fumigatus</i> genome.	F	F	T	F	F	F	F	T	T
88	Antifungal cream is not useful for the treatment of <i>Aspergillus fumigatus</i> skin infection.	T	T	T	T	F	F	F	T	F
89	Treatment of the underlying HIV infection by anti-retroviral therapy is important for long-term control of <i>Aspergillus fumigatus</i> infection.	T	T	T	T	F	F	F	T	T
90	Detection of antifungal resistance in <i>Aspergillus fumigatus</i> can be achieved by MALDI-TOF MS.	F	F	F	F	F	F	F	F	F

91	The incidence of fluconazole resistance in <i>Aspergillus fumigatus</i> is similar in Asia, Europe and America.	T	F	F	T	F	F	F	F	F
92	Recombinant protein vaccination is extremely effective for prevention of <i>Aspergillus fumigatus</i> infection.	F	F	F	F	F	F	F	F	F
93	mRNA vaccination is extremely effective for prevention of <i>Aspergillus fumigatus</i> infection.	F	F	F	F	F	F	F	F	F
94	Travel of HIV-positive patients to <i>Aspergillus fumigatus</i> endemic areas is not recommended.	F	F	T	T	F	F	F	T	T
95	Sexual transmission of <i>Aspergillus fumigatus</i> can be prevented by using condom.	F	F	F	F	F	F	F	F	F
96	No commercially available vaccine is available for <i>Aspergillus fumigatus</i> .	T	T	T	T	T	T	T	T	T
97	<i>Aspergillus fumigatus</i> infection in bone marrow transplant recipients can be prevented by oral fluconazole prophylaxis.	F	T	F	T	F	F	F	T	T
98	Prevention of infections caused by <i>Aspergillus fumigatus</i> is much easier than infection caused by other <i>Aspergillus</i> species.	F	F	F	F	F	F	F	F	F
99	Since the spores of <i>Aspergillus fumigatus</i> can be filtered by the HEPA filter, the HEPA filter is extremely important for prevention of <i>Aspergillus fumigatus</i> infections in bone marrow transplant recipients.	T	T	T	T	T	T	T	T	T
100	Prevention of <i>Aspergillus fumigatus</i> infections can be achieved by not hospitalizing immunocompromised patients in hospitals with construction work.	T	T	T	T	T	T	T	T	T