

Supplementary Table 6. Fungal and parasitic taxa identified by mNGS using an RPM ratio metric

*re-classified to a higher taxonomic rank because reads aligned equally well to multiple different organisms that shared the same species, genus or family

#positive result according to an RPM ratio ≥ 10 , where the RPM ratio = RPM(sample) / RPM(NTC)

*re-classified to a higher taxonomic rank because reads aligned equally well to multiple different organisms that shared the same species, genus or family

Abbreviations: PC, positive control; CSF, cerebrospinal fluid; mNGS, metagenomic next-generation sequencing; RPM, reads per million

species	genus	family	Normalized Reads Per million	
			DNA PC	DNA Patient CSF
Cryptococcus neoformans	Filobasidiella	Tremellaceae	10,696.4#	0.0
Aspergillus niger	Aspergillus	Aspergillaceae	1567.5#	0.0
Toxoplasma gondii	Toxoplasma	Sarcocystidae	947.9#	0.0
*	Filobasidiella	Tremellaceae	53.3#	0.0
*	*	Sarcocystidae	27.3#	0.0
Neospora caninum	Neospora	Sarcocystidae	5.1	0.0
Hammondia triffittae	Hammondia	Sarcocystidae	2.5	0.0
*	*	Aspergillaceae	2.1	0.0
*	Hammondia	Sarcocystidae	2.1	0.0
*	Aspergillus	Aspergillaceae	2.0	0.0
Hammondia hammondi	Hammondia	Sarcocystidae	1.6	0.0
Aspergillus fumigatus	Aspergillus	Aspergillaceae	1.5	0.0
Aspergillus awamori	Aspergillus	Aspergillaceae	0.7	0.0
Bartheletia paradoxa	Bartheletia	Bartheletiaceae	0.7	0.0
Cryptococcus gattii	Filobasidiella	Tremellaceae	0.7	0.0
Aspergillus kawachii	Aspergillus	Aspergillaceae	0.6	0.0
Spirometra erinaceieuropaei	Spirometra	Diphyllolothriidae	0.5	0.2
Mucor racemosus	Mucor	Mucoraceae	0.5	0.0
Aspergillus oryzae	Aspergillus	Aspergillaceae	0.4	0.0
Setosphaeria turcica	Setosphaeria	Pleosporaceae	0.4	0.0
Caenorhabditis remanei	Caenorhabditis	Rhabditidae	0.3	0.0
Aspergillus tubingensis	Aspergillus	Aspergillaceae	0.3	0.0
Anisakis simplex	Anisakis	Anisakidae	0.2	0.0
Penicillium solitum	Penicillium	Aspergillaceae	0.1	0.0

Plectosphaerella sp. 93 OA-2013	Plectosphaerella	Plectosphaerellaceae	0.1	0.0
*	*	Tremellaceae	0.1	0.0
Malassezia globosa	Malassezia	Malasseziaceae	0.1	0.0
Gongylonema pulchrum	Gongylonema	Gongylonematidae	0.1	0.0
Wallemia sebi	Wallemia		0.1	0.0
*	*	*	0.1	0.0
Candida parapsilosis	Candida	Debaryomycetaceae	0.1	0.0
Elaeophora elaphi	Elaeophora	Onchocercidae	0.1	0.0
Lichtheimia hongkongensis	Lichtheimia	Lichtheimiaceae	0.0	0.0
Brugia timori	Brugia	Onchocercidae	0.0	0.0
Parastromyloides trichosuri	Parastromyloides	Strongylidae	0.0	0.0
Sordaria macrospora	Sordaria	Sordariaceae	0.0	0.1
Bipolaris sorokiniana	Bipolaris	Pleosporaceae	0.0	0.0
Malassezia restricta	Malassezia	Malasseziaceae	0.0	0.0
Cladosporium oxysporum	Cladosporium	Cladosporiaceae	0.0	0.0
Strongylocentrotus purpuratus	Strongylocentrotus	Strongylocentrotidae	0.0	0.0
Caenorhabditis elegans	Caenorhabditis	Rhabditidae	0.0	0.0
Penicillium griseoroseum	Penicillium	Aspergillaceae	0.0	0.0
Fusarium graminearum	Fusarium	Nectriaceae	0.0	0.0
Leptosphaeria biglobosa	Leptosphaeria	Leptosphaeriaceae	0.0	0.0
Chaetomium globosum	Chaetomium	Chaetomiaceae	0.0	0.0
Myceliophthora thermophila	Myceliophthora	Chaetomiaceae	0.0	0.0
Alternaria tenuissima	Alternaria	Pleosporaceae	0.0	0.0
*	Saccharomyces	Saccharomycetaceae	0.0	0.0
Aphanomyces euteiches	Aphanomyces	Saprolegniaceae	0.0	0.0
Ophiostoma piliferum	Ophiostoma	Ophiostomataceae	0.0	0.0
Rhodotorula taiwanensis	Rhodotorula		0.0	0.0
Trichosporon domesticum	Trichosporon		0.0	0.0
Phoma herbarum	Phoma	Didymellaceae	0.0	0.0
Erysiphe alphitoides	Erysiphe	Erysiphaceae	0.0	0.0
*	Leptosphaeria	Leptosphaeriaceae	0.0	0.0
Zymoseptoria tritici	Zymoseptoria	Mycosphaerellaceae	0.0	0.0
Debaryomyces hansenii	Debaryomyces	Debaryomycetaceae	0.0	0.0
Alternaria alternata	Alternaria	Pleosporaceae	0.0	0.0
*	Phoma	Didymellaceae	0.0	0.0
*	Umbilicaria	Umbilicariaceae	0.0	0.0
*	Penicillium	Aspergillaceae	0.0	0.0
Wuchereria bancrofti	Wuchereria	Onchocercidae	0.0	0.0

<i>Cladosporium cladosporioides</i>	<i>Cladosporium</i>	<i>Cladosporiaceae</i>	0.0	0.0
<i>Saccharomyces bayanus</i>	<i>Saccharomyces</i>	<i>Saccharomycetaceae</i>	0.0	0.0
<i>Fusarium phaseoli</i>	<i>Fusarium</i>	<i>Nectriaceae</i>	0.0	0.0
<i>Dasybranchus</i> sp. DH1	<i>Dasybranchus</i>	<i>Capitellidae</i>	0.0	0.0
<i>Neofusicoccum parvum</i>	<i>Neofusicoccum</i>	<i>Botryosphaeriaceae</i>	0.0	0.0
*	<i>Cladosporium</i>	<i>Cladosporiaceae</i>	0.0	0.0
<i>Penicillium rubens</i>	<i>Penicillium</i>	<i>Aspergillaceae</i>	0.0	0.0
<i>Ustilago maydis</i>	<i>Ustilago</i>	<i>Ustilaginaceae</i>	0.0	0.0
<i>Mucor circinelloides</i>	<i>Mucor</i>	<i>Mucoraceae</i>	0.0	0.0
<i>Albugo laibachii</i>	<i>Albugo</i>	<i>Albuginaceae</i>	0.0	0.0