

The Update about Antimicrobial Agent

Antifungal Agent

Assoc. Prof. Pornumpa Bunjoungmanee
Pediatric Infectious Disease
Faculty of Medicine
Thammasat University



Outlines

: World Health Organization
: Center for Disease Control and Prevention
: Ministry of Public Health in Thailand

Burden of diseases

Antifungal agents

: PK/PD
: indication
: dosing and administration
: adverse reactions

: Candidiasis
: Aspergillosis
: Mucormycosis
: Cryptococcosis
: Prophylaxis

Guidelines

Case Scenario

: Preterm
: Immunocompromised host



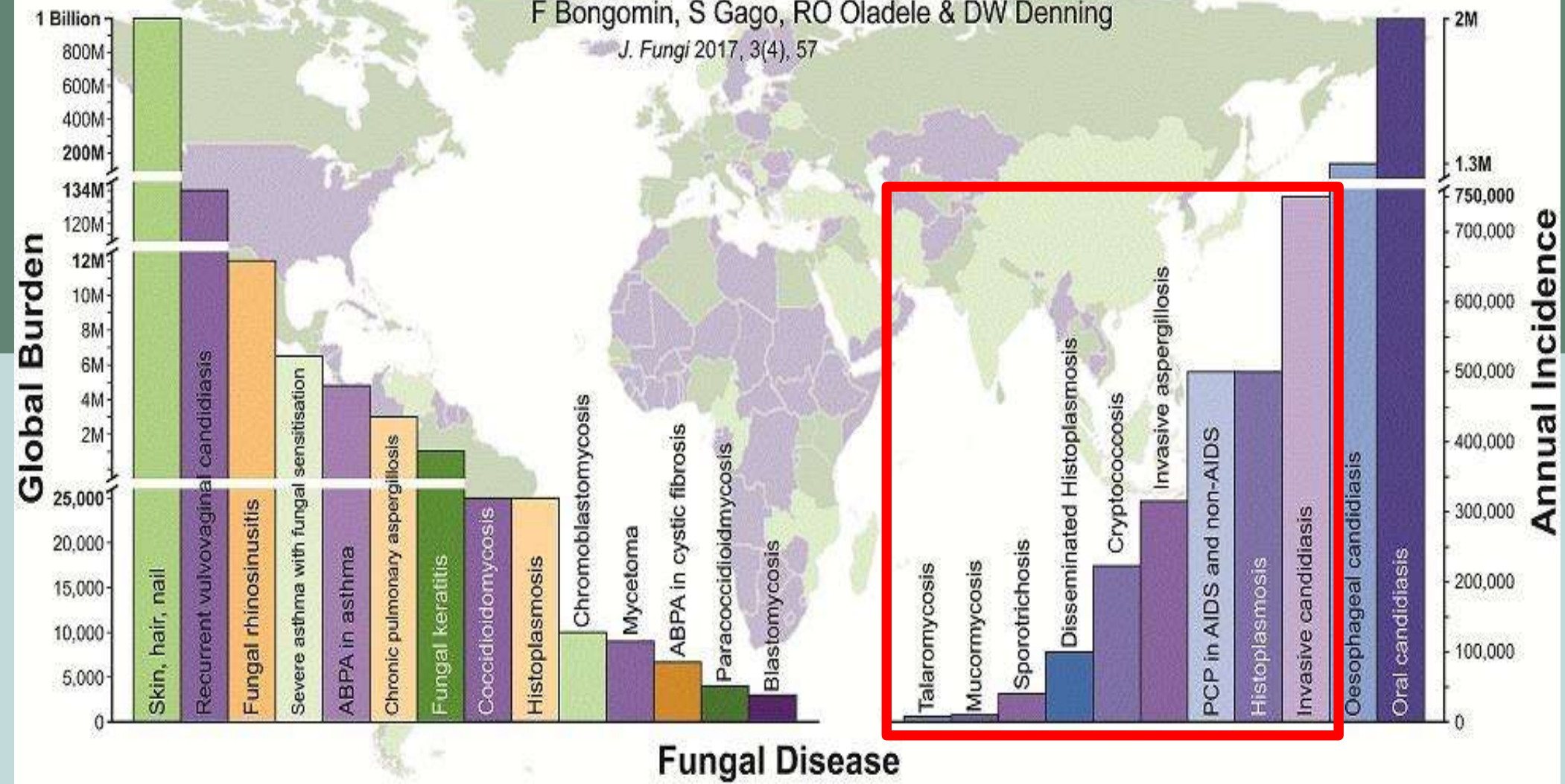
Outlines



Global and Multi-National Burden of Fungal Diseases - Estimate Precision

F Bongomin, S Gago, RO Oladele & DW Denning

J. Fungi 2017, 3(4), 57



Estimated hospitalizations, outpatient visits, and direct medical costs associated with fungal diseases in the United States in 2017.*

Disease	Number of hospitalizations	Number of outpatient visits	Total direct medical costs (\$)
<u><i>Aspergillus</i> infection</u> ★	14,820	**	1,254,833,662
<u>Blastomycosis</u>	950	**	23,391,998
<u><i>Candida</i> infection</u> *** ★	26,735	3,648,715	3,006,855,619
<u>Coccidioidomycosis</u>	6,670	**	198,456,142
<u><i>Cryptococcus</i> (<i>C. gattii</i> and <i>C. neoformans</i>) infection</u>	4,755	**	257,736,014
Dermatophyte infections (e.g., <u>ringworm</u>)★	690	4,981,444	821,433,855
<u>Histoplasmosis</u>	4,630	79,993	216,132,080
<u><i>Pneumocystis pneumonia</i></u>	10,590	**	475,394,902
<u>Mucormycosis</u>	1,140	**	125,350,373
Uncommon and opportunistic mycoses	5,585	**	565,827,281
Other and unspecified mycoses	1,770	204,780	306,063,348
Total	75,055	8,993,230	7,251,475,272