Diversity and Antifungal Susceptibilities of Clinical Yeasts in Hong Kong, June to December 2025

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Introduction

Current Epidemiology Studies Status of Yeast Infection

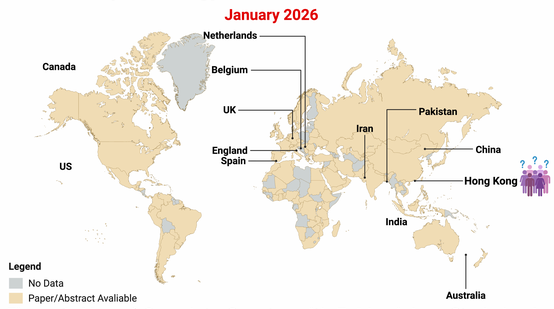

Figure 1: Map of Complete Country with Epidemiology Study by January 2026 [Ref. 1-2]. Emergence of antifungal resistance in *Candida* species is a global public health concern. Some nations and cities still lack epidemiology studies on yeast infection.

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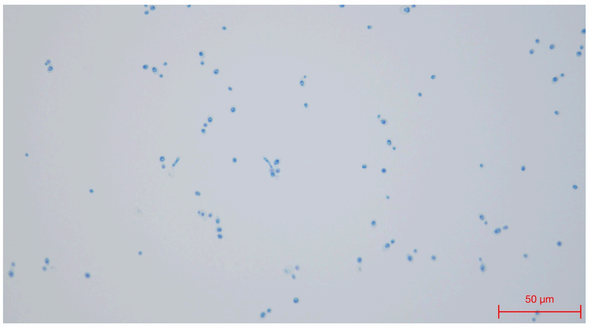
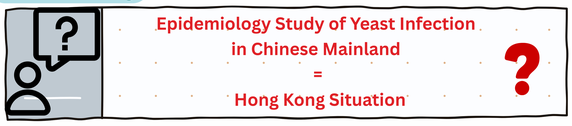


Figure 2: Microscopic View (400×) of *Candida albicans* Stained with Lactophenol Cotton Blue. This species accounts for the highest number of reported cases of *Candida* spp. infection.

Aim of Study



1. **Fill the research gap in the diversity and antifungal resistance of clinical yeasts in Hong Kong.**
2. **Review whether the antifungal resistance profiles of the local yeast isolates were comparable to those reported in the Chinese Mainland.**

Methodologies

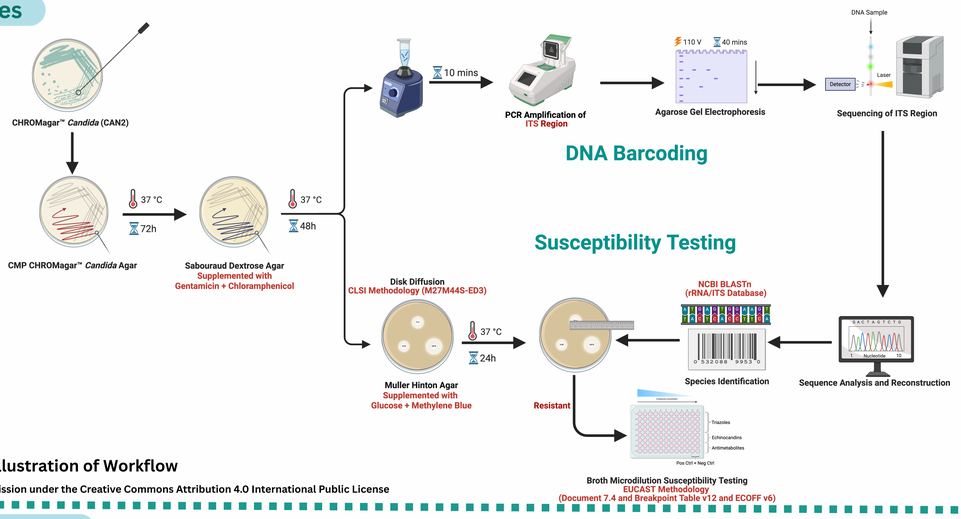


Figure 3: Graphical Illustration of Workflow

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Results & Discussion

In this study, a total of 160 specimens collected between June and December 2025 by a local private diagnostic laboratory were yeast culture-positive.

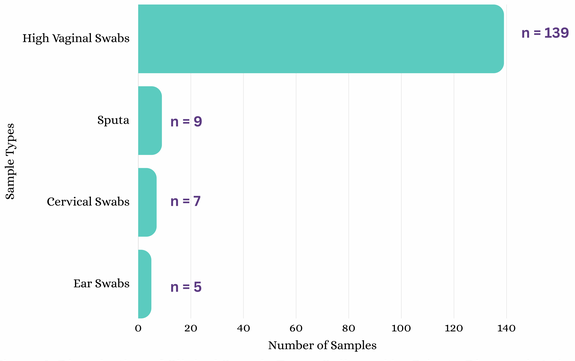


Figure 4: Distrubution of Clinical Sample Types Collected by Private Diagnostic Lab

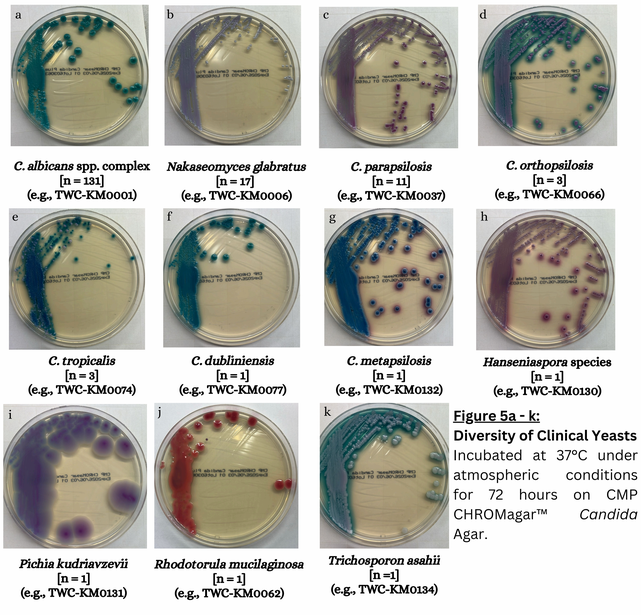


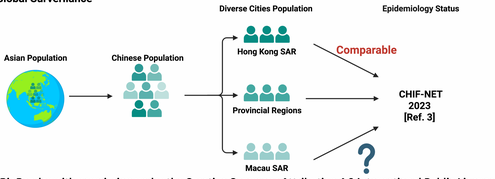
Figure 5a - k:
Diversity of Clinical Yeasts Incubated at 37°C under atmospheric conditions for 72 hours on CMP CHROMagar™ *Candida* Agar.

Table 1: Antifungal Susceptibilities of Clinical Yeast

	Echinocandins Micafungin Anidulafungin	Triazoles Fluconazole, Itraconazole, Posaconazole, Voriconazole	Antimetabolites 5-Flucytosine
Candida albicans [n = 12]	Susceptible [n = 11] Resistant [n = 1]	Susceptible [n = 1] Resistant [n = 11]	Wild-Type [n = 2] Non Wild-Type [n = 10]
Nakaseomyces glabratus [n = 3]	Susceptible [n = 2] Resistant [n = 1]	Susceptible, increased exposure	No Breakpoint or ECOFF Avaliable
Candida tropicalis [n = 1]	Susceptible	Susceptible, increased exposure	Wild-Type

Sixteen clinical isolates were confirmed as drug-resistant by Broth Microdilution Susceptibility Testing.

- **In this study, 177 clinical yeast isolates were recovered.**
- **A large diversity of yeasts was isolated from the clinical samples in Hong Kong, identified as 11 species/spp. complex.**
- **The antifungal resistance profiles of these local yeast isolates were comparable to those reported in the Chinese Mainland in 2023 [Ref. 3].**
- **Antifungal resistance represents a major challenge at both national and global levels. Local drug resistance surveillance on clinical yeasts is crucial to monitor any emergence of MDR yeasts in the community, aiding in safeguarding the health of citizens.**



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Acknowledgements

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Declaration of Conflict of Interests

There is no conflict of interest to be disclosed.