**Objectives:**

*Candida dubliniensis* is a species difficult-to-differentiate from the most common fungal pathogen,

*Candida albicans*, phenotypically. Commercial identification systems based on carbohydrate assimilation profiles might identify *C. dubliniensis* using a relevant database. However, most clinical laboratories relied on germ tube test alone or in combination with morphology on Corn Meal Tween 80 agar in the past. While *C. dubliniensis* and *C. albicans* can be reliably differentiated using MALDI-TOF/MS, MALDI-TOF technology was not widely available in routine laboratories until recent years. Thus, the prior diagnostic laboratory practices might have led to misidentification/underestimation of *C. dubliniensis* among clinical isolates. Also, as elevated fluconazole minimum inhibitory concentration (MIC) values have been reported to emerge in *C. dubliniensis* strains following repeated courses of treatment, increase in fluconazole resistance rates and negative impact on clinical outcome are potentially possible threats that also merit investigation. Relatedly and as a valued addendum, the revised EUCAST clinical breakpoints published in December 2024 introduced echinocandin breakpoints for *C.dubliniensis* which now enable interpretation of in vitro resistance.

This study aimed to i) assess the accuracy of species-level identification by re-identifying a set of *C. albicans* strains that were identified before MALDI-TOF/MS was introduced for routine practice in our center in 2019 and ii) retrospectively review available MIC values for *C. dubliniensis* to evaluate azole and echinocandin susceptibility profiles and explore any potential temporal change in resistance rates.

**Materials & Methods:**

The study was conducted in two parts. First, a set of archived isolates that had been identified as *C. albicans* prior to 2019—based on germ tube testing and growth at 45 °C—were reanalyzed using MALDI-TOF/MS to confirm species identification. In the second part of the study, fluconazole, voriconazole, micafungin, and anidulafungin (after year 2022) susceptibility data of *C. dubliniensis* isolates obtained after 2019 were retrospectively reviewed and interpreted according to the current EUCAST clinical breakpoints. Susceptibility testing was conducted using the EUCAST broth microdilution method (E.Def 7.4), which has been routinely implemented in our laboratory since 2019.

**Results:**

Among 218 archived *C. albicans* isolates that are reanalyzed by MALDI-TOF/MS, none were identified as *C. dubliniensis* and the identification was confirmed as *C.albicans* for all. Antifungal susceptibility test results of 387 *C. dubliniesis* isolates identified by MALDI-TOF/MS after 2019 were reviewed. Available MICs were 387 for fluconazole and voriconazole, 377 for micafungin and 161 for anidulafungin. Only one isolate was resistant to fluconazole and categorized as “susceptible, increased exposure” (I) to voriconazole. No resistance to echinocandins was observed in any of the *C. dubliniensis* isolates.

**Conclusions:**

Among clinical *C. albicans* isolates identified in our center using germ tube test and growth characteristics at 45 °C, we did not detect any inaccurate identification in terms of missed identification of *C. dubliniensis.* While antifungal resistance is currently very rare among *C. dubliniensis* strains isolated in our center, as acquired azole and echinocandin resistance are reported in the literature, susceptibility testing is recommended particularly for strains isolated from patients with prior antifungal exposure.