**Objectives**:

Dermatophytes are the most common cause of cutaneous fungal infections. Resistance to *Trichophyton* spp. is a global public health concern with numerous reports emerging worldwide. The high recovery rate of terbinafine (TRB) non-wild type (WT) strains of *T. indotineae* from Greek hospitals raises concerns (*Siopi* et al. JoF 2021). EUCAST has standardised a microdilution method (E.Def 11.0) for the susceptibility testing of microconidia-forming dermatophytes.

We investigated the *in vitro* susceptibility patterns of *Trichophyton* spp. recovered from patients attending the largest Dermatology Greek hospital (“Andreas Syggros”).

**Materials & Methods:**

A total of 237 clinical isolates of *Trichophyton* spp. (105 (44.4%) *T. rubrum*, 24 (10.1%) *T. tonsurans*, 9 (3.8%) *T. mentagrophytes*, 16 (6.7%) *T. interdigitale* and 83 (35%) *T. indotineae*), which were recovered from skin scrapings (*n*=127; 53.5%) and nail clippings (*n*=110; 46.5%) from individual patients attending our hospital in the period from 2018 to 2024, were tested. All clinical isolates were identified to the genus and species level by colonial and microscopic morphology and by MALDI-TOF MS (Autof ms1000, Autobio, Zhengzhou, China). In vitro susceptibility testing of *Trichophyton* isolates to terbinafine, itraconazole and voriconazole was performed under the proposed EUCAST broth microdilution reference method (E.DEF 11.0).

**Results**:

All isolates were considered wild type to itraconazole and voriconazole. 78/83 (93.9%) strains of *T. indotineae* were non-wild type to TRB (MICs 0.5 - >=2 mg/L) and 5/83 (6.1%) isolates were wild type (MICs <= 0.016 – 0.06 mg/L). All *T. indotineae* isolates were recovered from skin scrapings. Overall, the number of terbinafine-resistant *Trichophyton* dermatophytoses was 78/237 (32.9%).

**Conclusions**:

A high incidence (32.9%) of reek *Trichophyton* spp. clinical isolates with TRB non-WT appearance was recorded. In recent years, there has been an increasing trend of *T. indotineae* showing a non-wild phenotype to terbinafine, but not to azoles. These findings highlight the need to consider performing antifungal susceptibility testing at a local level, especially in patients who do not respond to empirical therapy of *Trichophyton*-induced infections. Mutations in the *SQLE* gene associated with TRB resistance are under investigation.