The *in vitro* activities of luliconazole, amorolfine, ciclopirox, and terbinafine were determined against 320 dermatophyte isolates from large toenails of onychomycosis patients enrolled into an ongoing phase 2b/3 clinical study. The geometric mean MIC for luliconazole was 0.00022 µg/ml against all isolates, compared to 0.0194 to 0.3107 µg/ml for the three other agents. The *in vitro* potency of luliconazole was maintained regardless of the dermatophyte species.
vitro activity against dermatophyte isolates collected from patients with against a limited number of dermatophytes and other causative organisms. The MICs of amorolfine, ciclopirox, terbinafine, and luliconazole, which were used in our study, except for itraconazole, currently have an FDA-approved indication for onychomycosis caused by dermatophytes. In addition, previous studies that directly compared luliconazole with other azoles against dermatophytes, such as clotrimazole, bifonazole, and miconazole, reported enhanced in vitro potency of luliconazole versus these other agents (8,9). The luliconazole MICs reported in these smaller studies against Trichophyton rubrum species (MIC range ≤ 0.00012 to 0.002) are similar to those we observed. In our study, the majority of isolates were T. rubrum. This is consistent with the species distribution previously reported in a large epidemiologic surveillance study of cutaneous fungal infections in the United States, in which the majority of fingernail- and toenail-derived dermatophyte isolates were T. rubrum (5). These data, along with the recent report demonstrating high concentrations within the toenails and good tolerability in patients with onychomycosis, suggest that luliconazole may be a suitable option for the treatment of this disease.

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