Antifungal activity of homoserine O-acetyltransferase (*Ca*Met2p) inhibitors

Objectives: Determination of the minimum inhibitory concentration of homoserine O-acetyltransferase (*Ca*Met2p) inhibitors against fungal strains in minimal medium YNB and RPMI1640

Methods: Minimum Inhibitory Concentrations (MICs) were performed by the modified M27-A3 procedure specified by the CLSI [*Wayne, P. Reference method for broth dilution antifungal susceptibility testing of yeasts; Approved standard - Third Edition. CLSI Doc. M27-A3 2008*]. In 96-well plates, solutions of inhibitors and reference antifungal compound fluconazole were serially diluted and inoculated with overnight tested fungal strains to the final concentration of ~ 10^4 colony-forming units (CFU)/mL in a Yeast Nitrogen Base (YNB) without amino acids supplemented with or without 0.05 - 10 mM L-methionine and Roswell Park Memorial Institute medium 1640 (RPMI1640). Plates were incubated at 37 °C for 24 h, the rate of growth was determined by measuring optical density at 600 nm at microplate reader (TECAN Spark 10M, Grödig, Austria). The MIC_{50} and MIC_{90} parameters are defined as the lowest concentration of antifungal compound which inhibit fungal growth in at least 50% or 90%, respectively.

Results: Fungal growth repression was observed for several *Ca*Met2p inhibitors and this effect was methionine dependent.