## Klára Lazařová Diploma thesis 2008

The aim of this work was the study of the fluconazol and terbinafine release from oligoester carriers branched with various concentration of either mannitol (3M, 5M, 8M) or dipentaerythritol (3D, 5D, 8D) and plasticized with 30 % triethyl citrate (TEC). Theoretical part is occupied with drug delivery systems and the conditions of the coupling of the macromolecules with the biological substrates. The 150,0 mg matrices composed of carrier, drug of 4% and plasticizer TEC of 30% were prepared. They were put to the static dissolution test using phosphate citrate buffer pH 5,0 at 37°C. The drug release was determined spectrophotometricaly at 261 nm for Fluconazole and 283 nm for Terbinafine. Fluconazole release was the fastest from carrier 5D. The carriers 5D and 8D released the drug during three stages, after burst effect was observed constant liberation followed slowing the process. The carriers branched using mannitol released the drug depending of the concentration of the mannitol.