

**Hlavsová Lucie: Acyclovir release from plasticized oligoesters. Diploma thesis. Faculty of Pharmacy in Hradec Králové, 2008.**

***Summary***

The aim of this work was the study of the Acyclovir 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) or 20 % ethyl pyruvate (EP). Theoretical part is occupied with physical-chemical properties of the lactic-glycolic polyesters, biodegradation and formation of the stereo complexes. It is also directed at the herpetic viruses, properties of ACV and other virostatics. The 150,0 mg matrices composed of carrier, Acyclovir of 4% and plasticizer either TEC of 30% or EP of 20% were prepared. They were put to the static dissolution test using phosphate citrate buffer pH 6,0 at 37°C. The ACV released was determined spectrophotometrically at 256 nm. The best release behaviour was found at the carrier 3M with the linear ACV released during 20 day. Significant acceleration at the 6<sup>th</sup> hour going on to the 1<sup>st</sup> day was observed.