

## SUMMARY:

Drug binding to plasma proteins is one of the primary pharmacological parameters. The binding rate has significant effects on drug distribution and drug elimination. In vitro investigation of plasma protein binding helps us foresee their destiny after its administration to a living organism. This dissertation focused on studying plasma protein binding of DOTA-NOC marking by  $^{90}\text{Y}$  and  $^{111}\text{In}$  in term of interspecies comparison. The binding was determined by methods of equilibrium dialysis at  $37^\circ\text{C}$ . Results showed binding of  $^{90}\text{Y}$ -DOTA-NOC increases respectively: human < rabbit < bovine < rat plasm. Binding of  $^{111}\text{In}$ -DOTA-NOC increases respectively: pork < human < rat < rabbit plasm.

## KEYWORDS:

protein binding, DOTA-NOC,  $^{111}\text{In}$ ,  $^{90}\text{Y}$ , interspecies comparison