

Poster Presentations – Field A1. Pharmacology

[PA1-1] [04/20/2001 (Fri) 10:30 – 11:30 / Hall 4]

HPLC Analysis of the Conversion of Hydroxamic Acids into Their Corresponding Carboxylic Acids for Monitoring the Metabolic Hydrolysis of Hydroxamic Acid-based MMPI in Rat

Paek SH, Park MJ, Huh JD, Shin HC, Park YJ, Yoo JU

Drug Discovery Lab, Samsung Advanced Institute of Technology, Korea Research Institute of Chemical Technology, Taejeon

A HPLC monitoring was used to determine the metabolic hydrolysis of several hydroxamic acid-based matrix metalloprotease inhibitors in the course of the pharmacokinetic study using rat in vivo. As one of the important classes of MMP inhibitors, hydroxamic acids-based compounds are extensively studied for their inhibitory activities against varying MMPs. Many of these compounds are found to be metabolized rapidly in vivo, adversely affecting their utility in treating the disease. Further in vitro and in vivo experiments suggest that the hydrolysis of hydroxamic acids to the corresponding carboxylic acids may be the major route of metabolism of many hydroxamates. Therefore, determination of the susceptibility of these compounds to hydrolysis is critical for the synthesis and selection of metabolically stable drug candidates and for the development of improved orally bioavailable analogs.

[PA1-2] [04/20/2001 (Fri) 10:30 – 11:30 / Hall 4]

The Investigation on the Biodegradation and Release of Norfloxacin Loaded in Poly (DL-lactide-co-glycolide) (PLGA) Nanoparticle

Nah Jae Woon, Jeong Yeong Il¹, Jang Mi Kyeong, Kweon Jung Keon²

Dept. of Polymer Science & Engineering, Suncheon National University, ¹Research Institute of Medical Science Chonnam National University, ²Dept. of Chemical & Industrial Environment Chosun College of Science & Technology