induced in SCI-injured rabbits models after oral and IV administration of DA-8159(0.3mg/kg-10mg/kg). Furthermore, the efficacy was potentiated by administration of sodium nitroprusside. These results demonstrate that DA-8159 has a reliable and reproducible effect on penile erection in spinal cord injured rabbits.

[PA1-23] [10/18/2002 (Fri) 09:30 - 12:30 / Hall C]

Pharmacology of novel vanilloid receptor antagonists

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Capsaicin and analogues are valuable analgesic agents when administered to mammals, including humans. However, their pungency, hypothermia and the effects on the cardiovascular and respiratory systems through their general activation of primary afferents severely limit their use. So competitive antagonists have been pursued as a novel pharmacological agent for analgesics, rather than agonists. We have identified a new class of potent and selective vanilloid receptor (VR) antagonists. These antagonists exhibit highly potent antagonistic activities in both $^{45}Ca^{2+}$-uptake and single channel patch clamp assays as well as analgesia in capsaicin test and PBQ writhing test. Furthermore, these compounds are devoid of the important shortcomings of capsaicin, such as hypothermia and pungency. These results suggest that VR blockade could be a novel therapeutic approach to analgesia.

[PA1-24] [10/18/2002 (Fri) 09:30 - 12:30 / Hall C]

IN VIVO METABOLISM OF 2-METHYLAMINOETHYL-4,4'-DIMETHOXY-5,6,5',6'-DIMETHYLENEDIOXYBIPHENYL-2'-CARBOXY-2-CARBOXYLATE (DDB-S) BY LC/ESI TANDEM MASS SPECTROMETRY

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2-Methylaminoethyl-4,4'-dimethoxy-5,5',6,6'-dimethylenedioxybiphenyl-2'-carboxy-2-carboxylate (DDB-S) is a synthetic compound derived from DDB, which is protects liver against carbon tetrachloride-, D-galactosamine-, thioacetamine-, and prednisolone- induced hepatic injury in experimental animals. We assessed the use of liquid chromatography/electrospray iontrap tandem mass spectrometry (LC/MS/MS) method to identify and quantify in vivo metabolites and to measure excretion. DDB-S was administered intravenous to rats, and samples of urine, and feces were collected and analyzed by LC/MS. This method identified twelve metabolites in urine and feces. The major metabolic pathways of DDB-S in rats were identified as demethylenation of the methylenedioxyphenyl group and demethylation of the carboxymethyl moiety. The others were identified as demethylenation and demethylation, and glucuronidation.

[PA1-25] [10/18/2002 (Fri) 09:30 - 12:30 / Hall C]

Selectivity of the optical isomers of KR30031 on MDR reversal activity and cardiotoxicity