newly synthesized naphthyridine derivatives against several clinical isolates of H.pylori. MICs were determined by a routine agar dilution technique with blood agar base #2, supplemented with 10% fetal bovine serum. The results showed that the strains were susceptible to our compounds as well as omeprazole. Some of the compounds were about 3 to 5 times more potent than omeprazole. These reuslts suggest that our new compounds have potent inhibitory activities against H. pyloriand might be useful for the clinical eradication of H. pylori.

[PA1-6] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## Tetrandrine Stimulates the Apoptosis of Rat Hepatic Stellate Cells

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One of the therapeutic goal for hepatic fibrosis is to eliminate the activated hepatic stellate cells by apoptosis, as hepatic stellate cells play a central role in hepatic fibrosis. In this study, we investigated apoptosis stimulation by tetrandrine in activated rat hepatic stellate cells.

Transformed rat hepatic stellate cells (T-HSC/Cl-6) and rat hepatocytes were treated with tetrandrine. Treatment with tetrandrine in T-HSC/Cl-6 cells resulted in morphologic alterations, induction of low molecular weight DNA fragmentation, activation of caspase-3 and caspase-8, subsequent proteolytic cleavage of poly(ADP-ribose) polymerase in a concentration-dependent manner, at concentrations that had no effect on the viability of rat hepatocytes. But tetrandrine had no effect either on mitochondrial membrane depolarization or the release of cytochrome c from mitochondria into the cytosol. In conclusion, results above demonstrate that tetrandrine stimulates apoptosis via caspase-3 and caspase-8 activation in T-HSC/Cl-6 cells at concentrations that have no toxicity on hepatocytes. And this might be one of the antifibrotic mechanims of of tetrandrine in vivo.

[PA1-7] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## Dimethylsulfoxide Inhibits the Degranulation of Mast Cells by Interfering the Signaling Pathway of FccRI, M2 type Pyruvate Kinase

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We examined the effects of DMSO, a universal solvent for various chemicals, for the signaling pathways of high affinity IgE receptor (FcsRI). DMSO significantly inhibited FcsRI-mediated degranulation of RBL-2H3 cells. In order to find out specific signaling components affected by DMSO, cells were treated with DMSO and the FcsRI-mediated tyrosine phosphorylations of Syk, PLC-\(\chi\_1\), PLC-\(\chi\_2\), ERK, and pyruvate kinase were examined. DMSO at 0.5% specifically inhibited FcsRI-mediated tyrosine phosphorylation of M2 type pyruvate kinase, which we recently reported as a new signal component of FcsRI. These results show that DMSO could interfere with the signaling of FcsRI when used above certain concentration by interfering with the modulation of M2 type pyruvate kinse through FcsRI.

[PA1-8] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

Vasorelaxant effect of BMS-180448, a novel ATP sensitive K+ channel opener, in rat aorta

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