〔Prostaglandins Leukotrienes Essential Fatty Acids, **45**, 233-238 (1992)〕 [Lab. of Pharmacology]

The Effect of Three Novel Thromboxane A_2 Receptor Antagonists (S-1452, AA-2414 and ONO-3708) on the Increase in Pulmonary Pressure Caused by Forssman Anaphylaxis in Guinea-Pigs.

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The effects of three novel thromboxane A_2 antagonists (S-1452, AA-2414 and ONO-3708) on the increase in pulmonary pressure caused by Forssman anaphylaxis in guinea-pigs were investigated. These antagonists clearly inhibited the pulmonary pressure increase by Forssman anaphylaxis. The decrease in peripheral platelet counts caused by Forssman anaphylaxis was also inhibited by these agents. The changes in leukocyte counts and mediator levels in bronchoalveolar lavage fluid (BALF) were unaffected by these agents.

〔Prostaglandins Leukotrienes Essential Fatty Acids, **47**, 41-49 (1992)〕 [Lab. of Pharmacology]

Effects of a Newly Synthesized Leukotriene Antagonist, NZ-107, on Immediate-Type Hypersensitivity Reaction in Rats and Guinea-Pigs.

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The effects of 4-bromo-5-(3-ethoxy-4-methoxybenzylamino)-3(2H)-pyridazinone (NZ-107) on immediate-type hypersensitivity reactions in rats and guinea-pigs were studied. NZ-107 suppressed homologous passive cutaneous anaphylaxis (PCA), histamine-, leukotriene (LT)C_4- and LTD_4-induced skin reactions in rats. LTC_4- and LTD_4-induced contractions of isolated rat stomach smooth muscle and antigen-induced histamine release from rat peritoneal mast cells were inhibited by NZ-107. The agent inhibited guinea-pig heterologous PCA and antigen-induced histamine release from guinea-pig lung tissue. The agent also inhibited antigen-induced bronchoconstriction and eosinophil accumulation in the bronchoalveolar lavage fluid of guinea-pigs.

〔Prostaglandins Leukotrienes Essential Fatty Acids, **47**, 51-57 (1992)〕 [Lab. of Pharmacology]

Effect of a Newly Synthesized Leukotriene Antagonist, (E)-2,2-Diethyl-3'-2-2-(4-Isopropyl) Thiazolyl Ethenyl Succinanilic Acid (MCI-826), on Immunological Liver Injury and Nephritis in Mice.

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The effect of a newly synthesized leukotriene (LT) antagonist, (E)-2,2-diethyl-3'-2-2-(4-isopropyl) thiazolyl ethenyl succinanilic acid (MCI-826), on liver injury and nephritis in mice was studied. MCI-826 clearly inhibited LT-induced vasculitis, as well as liver and kidney injury. MCI-826 inhibited liver injury caused by anti-basic liver protein antibody in mice immunized with rabbit IgG, and by bacterial lipopolysaccharide in mice treated with Corynebacterium parvum. MCI-826 also inhibited nephritis caused by anti-glomerular basement membrane antibody.