(Int. Archs Allergy appl. Immun., 78, 113 (1985))

## Pharmacological characterization of mouse ear PCA.

NAOKI INAGAKI, SHOICHI GOTO, HIROICHI NAGAI, AKIHIDE KODA\*

Effects of some antiallergic agents on homologous PCA in mouse ear were investigated by means of assessing the amount of extravasated dye. Antihistamines and antiserotonins suppressed mouse ear PCA significantly. In contrast, an antagonist of SRS-A and an inhibitor of SRS-A synthesis did not suppress the reaction.  $\beta$ -Adrenergic stimulants and theophylline, which elevate cyclic AMP levels, also suppressed mouse ear PCA significantly. The antiallergic agents, N (3', 4'-dimethoxycinnamoyl) anthranilic acid and ketotifen suppressed mouse ear PCA significantly, but disodium cromoglycate failed to suppress the reaction.

(Carcinogenesis, 6, 415 (1985))

Mutagenic Activation of Carcinogenic N-Nitrosopropylamines by Rat

Liver: Evidence for a Cytochrome P-450 Dependent Reaction.

YUKIO MORI\*, HIROSHI YAMAZAKI, KAZUMI TOYOSHI, TAKAO MAKINO,

Takeshi Obara, Yoshihiko Yokose, Yoichi Konishi

Mutagenic potential of 7 carcinogenic N-nitrosopropylamines was examined by the Ames's liquid incubation assay, using rat liver 9000 g supernatant (S9) fraction for metabolic activation. Results demonstrate a correlation between rat liver S9 dependent mutagenicity of six N-nitrosopropylamines and their known carcinogenicity in rat *in vivo* experiments, and that the phenobarbital inducible major cytochrome P-450 is involved in the mutagenic activation. One of the nitrosamines tested was also shown to be activated by extrahepatic tissue S9, blood S9 and bovine serum albumin to the extent of 50% of that activity obtained with liver S9.

(Mutat. Res., 142, 153 (1985))

Inhibitory Effect of Organic Solvents on the Mutagenicity of N-Nitrosodialkylamines in Salmonella.

Yukio Mori\*, Hiroshi Yamazaki, Kazumi Toyoshi, Yohko Emi,

KAZUHIKO UCHIDA, MASAHIRO TSUTSUMI, YOICHI KONISHI

The influence of organic solvents on the mutagenicity of 11 N-nitrosamines was examined in Salmonella typhimurium TA100 using the Ames's liquid incubaion assay in the presence of rat liver S9. All the mutagenic activities were considerably decreased by addition of dimethyl sulfoxide, dimethyl formamide, acetone, 95% ethanol or acetonitrile, which are recommended for use as solvents in the assay by Ames's group, to the incubation mixture. The inhibitory effect is a result of interference with the process of metabolic activation by liver S9.