〔Drug Metab. Dispos., **13**, 239 (1985)〕

Species Differences in the Metabolism of Suprofen in Laboratory Animals and Man.

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The metabolism of the oral anti-inflammatory agent suprofen (S), 2-(4-(2-thienylcarbonyl)phenyl)-propionic acid, has been studied in mice, rats, guinea pigs, dogs, monkeys, and human volunteers. The major metabolites of S in the serum, urine, and feces of these species were determined by GC/MS and HPLC techniques. The metabolic pathways of S in these species involved reduction of the ketone group to an alcohol (S-OH), hydroxylation of the thiophene ring (T-OH), elimination of the thiophene ring to a dicarboxylic acid (S-COOH), and conjugation with glucuronic acid or taurine. Metabolism and absorption parameters of S in the monkey were similar to those in man; however, other species were very different from man.

〔J. Chromatogr., **341**, 251 (1985)〕

Application of Radioisotope Tracer Techniques to Analytical Gas Chromatography: Determination of Gas Chromatographic Peak Yield.

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The determination of gas chromatographic peak yields using a radio-gas chromatography system, in which ^{14}C-labelled substances eluted from a gas chromatography column are burnt to $^{14}CO_2$ through a combustion tube, is described. As the first step of the study, the adequacy of the combustion tube was investigated by a radioisotope tracer technique. Consequently, it was found that almost complete combustion could be achieved by the combustion tube for the substances investigated.

〔Mutat. Res., **143**, 121 (1985)〕

Genotoxicity of Fungal Metabolites to Aflatoxin B_1 Biosynthesis.

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The genotoxicity of several anthraquinone compounds metabolically related to aflatoxin B_1 was examined by means of the hepatocyte primary culture (HPC)/DNA repair test and the Salmonella microsome mutagenesis test, and compared to versicolorins A and B which are potent mutagenic and genotoxic intermediates of the aflatoxin biosynthetic pathway. 6, 8-*O*-Dimethyl-versicolorins A, B and 6-deoxyversicolorin A were found to be strongly mutagenic and genotoxic. Genotoxicity of versicolorin A and 6,8-*O*-dimethylversicolorin A was stronger than that of versicolorin B and 6,8-*O*-dimethyl-versicolorin B, respectively, in the HPC/DNA repair test. Nidurufin and norsolorinic acid exhibited questionable activities for mutagenicity and no genotoxicity. It is suspected that 6, 8-*O*-dimethyl-versicolorins A, B and 6-deoxyversicolorin A as well as versicolorins A and B are genotoxic carcinogens.