## Drug Metabolism and Disposition: the biological fate of chemicals

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In this Issue:

Metabolism of WR 238605
Metabolism of Primaquine, WR 1995, and WR 6026
Further Metabolism of FK506 by Liver Microsomes
Ocular and Systemic Absorption of PG Derivative
Suppression of Drug Metabolism by Infection
Biosynthesis of CTFG
Pharmacokinetics and Organ Clearance of

Role of CYP2B6 in Haloethene Metabolism Biotransformations of L-702,539 Xenopus Embryonic Retinoid Metabolism I Xenopus Embryonic Retinoid Metabolism II Pharmacokinetics of Topiramate in the Dog Biotransformation of CI-937 in Rat Hepatocytes Fluorine-containing Metabolites of HCFC133a NDPS Metabolism by Isolated Rat Hepatocytes ET18-OMe Metabolism in Vitro and ex Vivo Characterization and Formation of 1-O-CAG Metabolism of S-(1,2-DichlorovinyI)-L-cysteine 1<sup>14</sup>CINA in Perfused Mouse Liver [14C]NA in Perfused Mouse Liver Budesonide Metabolism by Human Cytochrome P450 Stereoselective Zileuton Glucuronidation

**Human Cytochrome P450 Inhibitors** 

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Submission of manuscripts. DRUG METABOLISM AND DISPOSITION will consider for publication manuscripts describing the results of original research that contribute significant and novel information on xenobiotic metabolism and disposition. The term xenobiotic includes therapeutic agents as well as environmental chemicals, and research may involve the use of in vivo or in vitro approaches, including cultured cells and heterologous expression systems. Manuscripts describing the results of pharmacokinetic/pharmacodynamic research are invited. Manuscripts that examine mechanistic aspects of xenobiotic metabolism as well as those examining mechanisms that affect xenobiotic metabolism or disposition, including drug-metabolizing enzyme expression, regulation of drugmetabolizing enzyme gene expression, and genetic polymorphism, are encouraged. Manuscripts concerned with genetic, nutritional, or hormonal factors that influence the biological fate of chemicals are also of interest, as are those that address the toxicologic consequences of xenobiotic metabolism.

Three copies of each manuscript should be sent to Dr. Raymond F. Novak, Editor, DRUG METABOLISM AND DISPOSITION, The Institute of Chemical Toxicology, Wayne State University, 2727 Second Avenue, Room 4000, Detroit, MI 48201-2654. Telephone: (313) 961-4943. Fax: (313) 577-0082. Submission of a manuscript implies that the material contained therein has not previously been published except as an abstract for a scientific meeting, and that it is not being submitted elsewhere.

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- 2. Running title not exceeding 50 total characters and spaces. The name and address of the person to whom editorial correspondence and galley proofs should be sent should appear at the bottom of this page.
  - 3. Abstract of not more than 250 words.
- 4. Introduction. A brief summary of the pertinent literature and a statement of the aims of the work.
- 5. Materials and Methods. Species, strains, sexes, and ages or sizes of animals, with Latin names where required for distinction, should be given. Sources and purities of chemicals other than common reagents should be indicated. Equipment used and conditions of use should be specified. When published methods are used, a bibliographic reference is sufficient; minor modifications should be described. When a method has been extensively modified, the entire new procedure should be described. Authors should attempt to describe their work in all cases so that their peers would be able to repeat the experiments. Where conditions for similar experiments vary throughout the work, these may be indicated in legends to figures and tables. Properties and proof of structure must be given for reference compounds used for metabolite identification.
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Spectrometry:  $A_{000}$  [absorbance (not OD or E) at 000 nm (not m $\mu$ ) wavelength];  $\epsilon$  (molar absorption coefficient, with units M<sup>-1</sup> cm<sup>-1</sup>); UV (ultraviolet); IR (infrared); ESR (electron-spin resonance); NMR (nuclear magnetic resonance);  $\delta$  [chemical shift, with units ppm (parts per million)]; s (singlet); d (doublet); t (triplet); m (multiplet); amu (atomic mass units); m/z (mass/charge ratio).

Chromatography: TLC (thin-layer chromatography); R<sub>F</sub> (retardation factor); GLC (gas-liquid chromatography); R<sub>T</sub> (retention time); GC/MS (coupled gas chromatography-mass spectrometry); HPLC (high-pressure liquid chromatography).

Equilibrium and kinetic constants:  $K_a$  (dissociation constant);  $K_s$  or  $K_i$  (dissociation constant of enzyme-substrate or enzyme-inhibitor complex);  $K_M$  (Michaelis constant);  $V_{\max}$  (maximum initial velocity); k (rate constant);  $pK_a$  (negative logarithm of acidic dissociation constant);  $t_{1/2}$ , half-life; AUC, area under the curve of plasma concentrations vs. time.

Statistics: p (probability of chance observation); N (number of experiments); SD (standard deviation of the series); SE (standard error of the mean).

Other abbreviations: °C (degrees of temperature); g (acceleration due to gravity, as in 9000g); rpm (revolutions per min); LD<sub>50</sub> and ED<sub>50</sub> (median lethal and effective doses); iv (intravenous); ip (intraperitoneal); im (intramuscular); sc (subcutaneous); po (peroral); m.p. (melting point); sp.g. (specific gravity).

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