BOOK REVIEW

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A Review of Analytical Procedures for Therapeutic Drug Monitoring and Emergency Toxicology, 2nd ed.

REFERENCE: Baselt, R. C., Analytical Procedures for Therapeutic Drug Monitoring and Emergency Toxicology. 2nd ed., PSG Publishing Company, 545 Great Rd., P.O. Box 6, Littleton, MA 01460, 1987, $42.00 (U.S.), hardcover, 329 pp.

This is the second edition of a popular laboratory procedures manual first published in 1980. The volume retains the same format as the original work. Drugs or classes of drugs commonly analyzed for in therapeutic monitoring or clinical toxicology are indexed in alphabetical order with one or more specific procedures for their analysis in blood, plasma, serum, and/or urine presented. Each procedure includes: the principle of the method, necessary reagents and their preparation, instrumental conditions, extraction protocol, calculation of results, performance characteristics, and possible interferences with the assay. The directions are well written, clear, concise, and easy to follow. Should the analyst wish to inquire further, at least one reference is presented for each procedure. One hundred seventy-four procedures for the analysis of one hundred and one drugs are presented. Unfortunately, only 15 of these are new additions to the 1980 first edition. The remaining 159 procedures are exactly as previously published reflecting 1970s technologies (for example, packed gas chromatographic [GC] columns, flame ionization detectors [FID]).

New procedures include quantitative gas chromatographic/mass spectroscopic (GC/MS) assays applicable to blood or urine for the five drugs of abuse presently listed in the National Institute on Drug Abuse (NIDA) Forensic Drug Testing Guidelines: amphetamine, cocaine, marijuana (THC-acid), opiates, and phencyclidine. Methods for tetracyclic antidepressants and alprazolam, recent concerns in the clinical toxicology laboratory, have been added. New therapeutic agents, amikacin, cimetidine, cyclosporine, tobramycin, verapamil, and a new method for ibuprofen are now included. These new methods are either gas or high pressure liquid chromatography procedures.

The book is handsomely printed; however, a few editing errors were present in my copy. Alprazolam/trazolam is deleted from the table of contents which disrupts the numbering in pages 15–25, and pages 212 and 214 were switched in printing. To those lacking access to a copy of the first edition, this book is a valuable source of specific analytical procedures; however, toxicologists who presently have the first edition may wish to consider if the price of the new book is worth the limited amount of new material.

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