

**Table I—*In Vitro* Binding of Pentylene-tetrazol to Plasma Protein**

Protein	Equilibrium Concentration of Pentylene-tetrazol, mg. %	Bound, %
Rabbit whole plasma	16.6 166.0	8.9 9.0

tained in 30-ml. beakers covered with parafilm. Control samples were run simultaneously with the samples. An extract of the outside aqueous phase was quantitatively determined for protein-free pentylene-tetrazol by GC analysis using a flame-ionization detector and a 5% Carbowax 20 M<sup>2</sup> on Chromosorb W column (4).

The results of the binding studies (Table I) indicated that a small fraction of pentylene-tetrazol was bound to rabbit plasma proteins at the concentrations used. The low equilibrium concentrations of pentylene-tetrazol were selected on the basis of an *in vivo* study performed in conjunction with the previously mentioned work (4).

The importance of correlating species differences to variation in percent binding of a drug to plasma proteins can not be ignored (5–7). It has also been shown

<sup>2</sup> Analabs, Inc., Hamden, Conn.

that binding data of a drug reported from one species cannot be transferred to other species (8).

In summary, our preliminary data indicated that pentylene-tetrazol is possibly bound to plasma proteins in some animals. The entire binding behavior of pentylene-tetrazol and related drugs is important enough to deserve further investigation.

(1) S. G. Rowles, G. S. Born, H. T. Russell, W. V. Kessler, and J. E. Christian, *J. Pharm. Sci.*, **60**, 725(1971).

(2) D. W. Esplin and D. M. Woodbury, *J. Pharmacol. Exp. Ther.*, **118**, 129(1956).

(3) J. M. Perel, M. M. Snell, W. Chen, and P. G. Dayton, *Biochem. Pharmacol.*, **13**, 1305(1964).

(4) J. L. Story, M. S. thesis, University of Georgia, Athens, Ga., 1971.

(5) A. Goldstein, *Pharmacol. Rev.*, **1**, 102(1949).

(6) A. Faran, *J. Pharmacol. Exp. Ther.*, **83**, 143(1945).

(7) R. Beutner, *ibid.*, **25**, 365(1925).

(8) J. J. Burns, "Metabolic Factors Controlling Duration of Drug Action," Macmillan, New York, N. Y., 1962.

J. T. STEWART<sup>▲</sup>

J. L. STORY

Department of Medicinal Chemistry  
School of Pharmacy  
University of Georgia  
Athens, GA 30601

Received September 16, 1971.

Accepted for publication January 28, 1972.

<sup>▲</sup> To whom inquiries should be directed.

## BOOKS

### REVIEWS

**Fourth International Congress on Pharmacology, Volumes I-V.**  
Edited by R. EIGENMANN. Lippincott, E. Washington Square, Philadelphia, PA 19105, 1970. 15 × 23 cm. Price \$80.00.

The proceedings of the Fourth International Congress on Pharmacology held in Basel, Switzerland, July 14 to 18, 1969, have been published in a five-volume set. This Congress is a new title for the International Pharmacological Meetings. The volumes are divided under the following general headings:

- Vol. I—Main Lectures, Discussion Groups, Demonstrations
- Vols. II and III—Trigger Meetings
- Vols. IV and V—Symposia

I must congratulate those responsible for gathering the necessary information, the arrangement of the topics, and the actual publication of the proceedings. This is a rather complex and difficult undertaking and, in the opinion of this reviewer, this task has been carried out admirably. These proceedings are an excellent source of current information on some of the latest findings in pharmacology. The subject matter spans a broad spectrum of topics, all of which are currently of interest and which are being studied by many workers. The list of scientists contributing to these proceedings is impressive and represents a truly international approach. There is a wealth of information included in these volumes. The readers will note that the discussions following certain main lectures are not just verbatim records of the comments made by various people. They

have been designed as an overall chairman's report and thus constitute another source of well-defined, neatly organized information based on the discussion of the main topic. The demonstration section presents topics ranging from holography to unexpected phenomena of flow. The extensive references should be of great help to the worker interested in the literature of a particular topic.

The trigger meetings were a novel approach focusing on the scientist and that person's sometimes unique approach to pharmacological problems. The papers do present fascinating ideas which should be of interest and probably will stimulate further work on some of the problems discussed.

In an attempt to keep the various forms of presentations together, under the general headings, the varied topics have of necessity been spread throughout the volumes. Thus, a reader may have to check each volume for information concerning a particular area. The actual printing is clear, easy to read, on good quality paper. The various figures and graphs are excellently reproduced. The five volumes are packaged in a bound slip case, thus helping to keep these volumes together. However, they are somewhat difficult to remove singly.

This publication is recommended to the biological scientist who is interested in being current in his or her own particular area as well as other areas now included under the broad heading of pharmacology.

Reviewed by John J. DeFeo  
University of Rhode Island  
Kingston, RI 02881 ■