

Smith Kline & French, the United States licensee of Rhone Poulenc, invested heavily in the development and testing of chlorpromazine although the initial discovery was made by the French company. A letter dated November 21, 1961 from the Director of Rhone-Poulenc* stated:

"Upon these first experiments on a limited scale we started our approaches to prospective licensees, especially in the United States, in order to widen the field of experimentation and bring out the product on the market as soon as possible.

"Our license agreement with Smith Kline & French was entered into because this company had expressed an enthusiastic interest in clinically testing and marketing chlorpromazine. Upon the basis of what was then known of the properties, this company was ready to proceed. After the license agreement, Smith Kline & French did proceed with the clinical program. Our own clinical testing efforts on a relatively small scale had preceded those of Smith Kline & French, but otherwise clinical testing by this company was concurrent with our own clinical testing efforts. As a consequence of both their clinical testing activity and our clinical testing activity, it was confirmed that chlorpromazine had the very unusual property which we now call ataraxic effect.

"In connection with the activity of both our company and Smith Kline & French in proceeding with clinical testing programs on chlorpromazine ataraxic activity, it should be remembered that the medical profession took a most dubious view toward the ataraxic effects and their possible value. The key step in proving the merit of chlorpromazine and of bringing about its use by the medical profession was the enthusiastic exploitation of every possible chance to bring home to the medical profession the results of such tests. It is very doubtful that the huge task of experimenting chlorpromazine against such odds would have been undertaken by Smith Kline & French were it not that the further marketing of the product would be protected under patent rights to permit the financial returns of the expenses involved and of the risks."

The attached Smith Kline & French pamphlet gives further details on the cooperative research and development efforts of the French and American companies on this product.

2. SUBSTANTIAL COMPANIES NOT INCLUDED IN RISK-RETURN STUDY (2789-90)

Senator Nelson requested a list of the "substantial companies" not included in the Standard and Poor Compustat tapes on which was based the Arthur D. Little, Inc. study entitled "Risk and Return in American Industry" (p. 2789).

If the criterion for a "substantial company" in the prescription drug industry is set at an annual sales level of \$30 million, then the PMA's records indicate that the Standard and Poor and, therefore, the Arthur D. Little, Inc. study omitted the following "substantial" prescription pharmaceutical manufacturing companies from the sample:

Lederle Laboratories (American Cyanamid).

E. R. Squibb & Sons (Olin Mathieson at that time).

Hoffmann-La Roche, Inc.

CIBA Pharmaceutical Company.

Geigy Pharmaceuticals.

Sandoz Pharmaceuticals.

Burroughs Wellcome & Co. (U.S.A.) Inc.

A. H. Robins Company, Inc.

There was good reason for the omission of all of these firms from the sample. The first two are divisions of larger chemical firms; no separate financial reports are available for the divisions. The next five are all subsidiaries of foreign-based firms; financial statements are not available separately for the United States operations. A. H. Robins Company became a public corporation only recently, so that data required for the Risk-Return study would not have been available for the entire time period covered.

On the other hand, the Standard and Poor tapes include one firm, Gillette, which is not a pharmaceutical manufacturer. Arthur D. Little, Inc., for purposes of its study, left Gillette in the sample to avoid any possible distortion of the data from the original Standard and Poor tape. The inclusion of Gillette, however, gives an upward bias to the average of drug industry profits, since Gillette

*Drug Industry Antitrust Act, Hearings before Subcommittee on Antitrust and Monopoly, Senate Judiciary Committee, on S. 1552, 1962, part 4, pp. 2157-58.