Senator NELSON. Dr. Van Riper, please proceed.

STATEMENT OF DR. HART E. VAN RIPER, VICE PRESIDENT FOR MEDICAL AFFAIRS, GEIGY PHARMACEUTICALS, ARDSLEY, N.Y.; ACCOMPANIED BY LLOYD N. CUTLER, SPECIAL COUNSEL, PHARMACEUTICAL MANUFACTURERS ASSOCIATION, WASHINGTON, D.C.

Dr. VAN RIPER. Thank you, Mr. Chairman.

I have submitted a statement for the hearing on November 16, and to conserve time, I have eliminated certain sentences in the statement that I will read today, but you may follow the statement that I have submitted in context.[1]

I am Hart E. Van Riper, M.D., vice president for medical affairs of Geigy Pharmaceuticals, division of the Geigy Chemical Corp., Ardsley, N.Y. I was graduated from the University of Pennsylvania, being awarded a bachelor of arts degree in 1926 and a degree of doctor of medicine in 1930.

After an internship and residency in pediatrics, I was certified by the American Board of Pediatrics and practiced my specialty in Madison, Wis., from 1933 to 1941.

From 1941 to 1944, I served as Assistant Director for Maternal and Child Health, the Children's Bureau, at that time a bureau in the Department of Labor.

From 1944 to 1945, I was medical director of the Jackson Memorial Hospital, Miami, Fla.

From 1945 to 1956, I was medical director at the National Foundation for Infantile Paralysis, and during this period was concerned with the research that culminated in the field trials that established the safety and efficacy of the Salk poliomyelitis vaccine.

Since 1956, I have been associated with Geigy Pharmaceuticals and for 7 years, as medical director, I have been responsible for the clinical investigation of new drugs and the filing of new drug applications with the Food and Drug Administration.

In my statement I would like to outline briefly some of the activities of the research-oriented companies in the pharmaceutical industry in preparing safe and effective medicines for the treatment, cure, or prevention of disease. I hope to give you some idea of the vast amount of time, effort, talent, and money expended in the clinical phases of drug research.

In an article entitled "The Evaluation of New Drugs," which appeared in the Archives of Internal Medicine, volume 119, Drs. Barron and Bukantz, authors of this scientific paper, state that "it is presently estimated that approximately 4 years will elapse between the time a drug is recommended for development by the corporation's scientific advisory board and submitted as a new drug application (NDA) to the FDA for review and approval for marketing." This period may

[1] The complete prepared statement and attachments submitted by Dr. Van Riper for presentation on Nov. 16, 1967, begins at p. 2360, infra.