## FURTHER ANALYSES

Many questions, in addition to those discussed in this report, have been applied to the data from this trial, such as the question of the interrelationships of cumulative effect, recency of last dose and amounts of aspirin consumed an attempt to see whether the trial could give any clue to an "optimum" aspirin regimen. However, it seemed desirable at this stage to present an overall view, as an invitation to readers to submit questions and suggestions that would help in the preparation of the more detailed report.

## PARTICIPATING CENTERS

Lack of space prevents listing the 46 observers and about 16 study-secretaries who contributed to this trial. (Study secretaries did not contribute patient assessments as some of them did in the Seven-day Variability Study.) The 11 participating centers were: Southwestern Medical School, Dallas; State University of New York, Downstate Medical Center, Brooklyn; University of Illinois, Chicago; University of California and V.A. Hospital, Los Angeles; Massachusetts General Hospital, Boston; Jackson Memorial Hospital, Miami; Rackham Arthritis Research Unit, University of Michigan, Ann Arbor; N.I.A.M.D. and Georgetown University Medical Center, Bethesda and Washington, D.C.; Presbyterian Hospital, New York; University of California, San Francisco; University of Tennessee, Memphis.

## ACKNOWLEDGMENTS

The Cooperating Clinics' program is supported by Grant AM-03252 from the National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, U.S. Public Health Service. The Coordinating Center is indebted to Mrs. M. O. Blake, Mr. P. C. Miller and Miss A. C. Powell for assistance in the analyses; and to the Merck Company for its generous and painstaking cooperation in the provision of drug and placebo.

Medical Statistics Unit, Room 1106, 112 East 19th Street, New York, N.Y.

Prepared for the A.R.A. Cooperating Clinics Committee by Donald Mainland, M.D., Ch.B., D.Sc., and Marion I. Sutcliffe, B.S., and revised by the Publications Subcommittee.

Senator Nelson. Please go ahead, Doctor.

Dr. LAWRASON. We doubt whether even the authors of this tentative, exploratory, and hopeful experimental design, with all of the complex statistical loose ends that remain to be tied up, would hold it up to the world as a finished and refined tool of biostatistics and control.

Let me make it clear that we at Merck are in no way opposed to the intense desire of experts in rheumatology to take steps forward in clinical design. However, we do not accept the validity of the cooperating clinics study presented to this committee last week as a measure of the value of indomethacin in medical practice. We do not believe a wholly satisfactory double-blind study for demonstrating the effect of a drug in treating rheumatoid arthritis has yet been

designed.

From what we know today, no drugs used in rheumatoid arthritis get at the cause of the disease, nor do they appear to halt its ultimate progression. Thus we are talking about drugs which will only give relief of symptoms. Much of this can be determined only by the patient and his physician. At this state of our knowledge there are no really good objective measurements or tests. Those we have, at best, are very crude. The rheumatoid patient manifests no objective laboratory parameters, such as the blood sugar of the diabetic, which the physician can point to and which enable him to know if the patient is improving.