suggested by animal experimental data and by some of the metabolic changes in human beings.

"In the final analysis, each physician must evaluate the advantages and the risks of this method of contraception in comparison with other available methods or with no contraception at all. He can do this wisely only when there is presented to him dispassionate scientific knowledge of the available data."

Dr. Roy Hertz, a National Institutes of Health endocrinologist and cancer specialist, filed a minority report for the committee that took a much graver view of the pill-cancer problem. He reminded people that all known human carcinogens show a long latent period—most of them about ten years, but ranging up to forty years—and that in most instances there is no way of detecting this fact during the period when the cancer is "cooking," as it were. Hertz also pointed out that all known human carcinogens are also carcinogens in animals and that therefore animal data are not irrelevant, as some have claimed. (It is ridiculously easy to produce tumors of all kinds in rats, mice, rabbits, hamsters, and dogs given estrogen, and early in 1966 an investigational drug of this class under study by Merck Sharp and Dohme was hastily removed from clinical trial when dogs developed breast cancers after a year of treatment.)

He then reviewed the accepted evidence that a young women's own estrogen or estrogen in pill form can make breast cancer worse, and observed that most breast cancers are probably in existence for years before they become clinically apparent. Hertz derided the claims that use of estrogens in women over the last twenty-five years had not changed the incidence of breast cancer, because most of the women so treated have not been young women, but were post-menopausal, and there is clear evidence of a difference between these ages in response to female hormones—estrogens are even used successfully to treat breast cancer in older women. He further revealed that the entire world literature on the risk of prolonged estrogen therapy causing breast and genital-tract malignancy is based on a pitifully small sample of less than 1,000 women, of whom only eighty-five were under forty years of age. He then performed a similar analysis of the worrisome situation with regard to uterine and cervical cancer, and the possible effects on ova and children ultimately born from the eggs of women who have taken the pill. In none of these situations could Dr. Hertz find reason for complacency. He ended with this unequivocal recommendation: "In view of the serious limitations in our knowledge of the potential long-term effects of estrogen-progestogen combinations, it is mandatory that further clinical experience be gained under properly controlled conditions of observations and follow-up."

The FDA report elicited predictable reactions in the interested parties. Physicians suspicious of the pill saw cause for alarm, and found no reassurance. The drug manufacturers saw the report as an exoneration of the drug. Dr. Louis M. Hellman, chairman of the FDA Committee, said the report was a "yellow" caution light. Dr. Alan Guttmacher of Planned Parenthood read it as "a complete green light." One could only recall the story of the blind men describing the elephant.

The British at first did no better than the Americans. In a country with a highly organized National Health Service with allegedly good record-keeping on drug usage, they relied on voluntary reporting by doctors instead of careful detective work on women in the childbearing years who died of strokes, heart attacks, pulmonary emboli, etc. The results were as inconclusive and unsatisfying as might be expected: "At present the number of deaths [voluntarily] reported is small and does not differ remarkably from expectation . . . [however] the deaths reported . . . may represent an underestimate . . . no firm conclusion can be drawn . . ."

A week earlier, in the *British Medical Journal*, which carried the above report, a distinguished Oxford professor wrote on "Adverse Reactions to Drugs," pointing out that the actual incidence of toxicity with a new drug with which he had worked was twenty-five times higher than one would guess from voluntary reporting by practitioners, and that one could, temporarily at least, quadruple the reported incidence by sending official requests for information to all British doctors. Obviously the hazards of under-reporting are universal, as is the likelihood that official government committees and drug manufacturers will neglect these hazards.

In the spring and summer of 1967, however, three independent British studies were reported that finally began to clarify the thromboembolic danger. All delivered an affirmative answer to the question, "Can oral contraceptives