progestagen contained in the pill may be expected to neutralize some of these effects of the estrogens. This view is based on the fact that estrogens and progestagens do antagonize each other in many of their respective biological effects. However, we do not know the optimal blend of each component required to yield a completely balanced result. Similarly, recent British studies indicate that for the thrombophlebitis effect the estrogenic component seems to be critical and it exerts its effect independently of the progestagenic component. In the case of chemically induced cancer of the uterus in rabbits, progestagens have been shown by Dr. Kistner whom you will hear from shortly—have been shown to neutralize the cancer-stimulating effect of the estrogens. Moreover, progestagens will suppress premalignant changes in the endometrium of women and will induce regression of preexisting endometrial cancer in women.

The proponents of the pill state that the progestagenic content of the oral contraceptives is therefore to be relied upon to suppress the potential carcinogenic action of the estrogenic component of this type of medication, while paradoxically the very existence of such a carcinogenic potential is categorically denied. In actuality, for each type of tissue response the result of the interaction between estrogen and progestagen must be determined by actual test. That the estrogen-progestagen combinations do produce tumors in dogs and mice indicates that the hoped-for neutralization effect for carcinogenesis simply does not occur with these specific mixtures in these species. The unanswered question is whether or not such neutralization effects will or will not occur in the breast and uterus of women. This we just simply do not know.

Advocates of the pill also state that since women using the oral contraceptives will have regularly repeated Pap smears, the use of this medication favors the early detection of cancer of the cervix in its curable stage. Why must a woman be expected to assume this additional burden when she should be having regularly repeated Pap

smears whether or not she is using any form of contraception? In closing, a few general remarks seem to be in order.

It is axiomatic that in the evaluation of any medication its risks must be carefully weighed against its benefits. The essential step toward this end is the determination of the risks involved. In the case of the oral contraceptives, this critical determination remains incomplete with respect to the problem of a potential carcinogenic effect in the breast and uterus. Apparently the FDA agrees that a demonstrable carcinogenic effect in the breast and uterus of test animals connotes some hazard for women and on this basis clinical trials with both Ethynerone and Neonovum have been discontinued. This step indicates an acceptance of the view that animal data have direct pertinence to the cancer problem in women.

In view of such an inherent risk, the special benefits of the pill as compared with the benefits of other contraceptives becomes an overriding consideration. The essential benefit to be obtained from any contraceptive is the prevention of an undesired pregnancy. Such a benefit means so many different things to so many people in so many different life situation that any universal denial or affirmation of the pill's special benefit for any or all potential consumers would be untenable. However, in view of the general availability of somewhat less effective but even more feasible alternative methods of contraception.