TABLE VII

ESTIMATED RELATIVE RISKS IN 1966 FOR DISEASES OF VEINS, ETC., (ICD 460-468), BY AGE AND COLOR

Age	20-24	25-29	30-34	35-39	40-44
White	4	5	6	8	22
Non-white	4	3	9	17	6

women using the oral contraceptives and those who are not. It should be clear that mortality rates were not available separately for these two groups. The estimates were made using the information on the proportion of the population using these drugs and the excess in mortality that appears to be present. The relative risks range from 3 to 9, with the exception of whites age 40 to 44 and non-whites 35 to 39. These values are not directly comparable to the estimates yielded by the British studies, which included women without a prior history of thromboembolism, and were concerned with thromboembolic disease appearing anywhere on the death certificate. It is impressive then that the values are of the same order of magnitude as those yielded in the case-control analyses, in which a relative risk of eight times was demonstrated. The very high value of relative risk for whites age 40 to 44 arises from allocating the increased mortality at that age to low estimates of oral contraceptive use. It has been suggested that administration of estrogens to pre-menopausal women became more common at about the same time as the oral contraceptive began to be used, and has increased in medical practice. One can speculate that there is a much broader base of hormonal use in women over age 40 than is indicated by surveys of family planning practice.

Another way to use the mortality data to indicate the relationship between oral contraceptive usage and mortality from ICD category 460-468 is in the form of estimating excess numbers of deaths (Table VIII).

The expected number of deaths for each five-year age group was computed separately for non-whites and whites using four different assumptions as to what these rates should have been. Two assumptions were that the slope of rates of women in 1962-66 should be that of men in the same time period or that of women 1956-61. The other two assumed that the relative slope, that is the slope divided by the mean rate, should be the same as the relative slope in these same two groups. Finally the expected

TABLE VIII

ESTIMATED EXCESS DEATHS, BY YEAR, FOR COMBINED AGES 20-44 FROM DISEASES OF VEINS, ETC., (ICD 460-468), WITH FOUR ASSUMPTIONS* FOR EXPECTED DEATHS

	1962	1963	1964	1965	1966
Observed Deaths	389	422	492	565	669
Expected Deaths					
Assumption 1	314	325	341	345	349
Assumption 2	315	324	346	351	360
Assumption 3	328	355	393	414	438
Assumption 4	333	363	406	431	458
Excess Deaths					
Assumption 1	75	97	151	220	320
Assumption 2	72	98	146	214	309
Assumption 3	61	67	99	151	231
Assumption 4	56	59	86	134	211
Average of Estimates of Excess	66	80	121	180	268

*Expected slope of mortality rates in women 1962-66 given by:

Assumption 1: Slope of mortality rates in women, 1957-61.

Assumption 2: Slope of mortality rates in women, 1957-1961, multiplied by ratio of mean of rates in women, 1962-66 and mean of rates in women, 1957-1961.

Assumption 3: Slope of mortality rates in men 1962-66.

Assumption 4: Slope of mortality rates in men, 1962-66 multiplied by ratio of mean of rates in women, 1962-66, and mean of rates in men, 1962-66.