**Please show the calculation for how the numbers in red where determined.**

Using Table 4, calculate the expected number of deaths for each age and latency category, and then an overall standardized mortality ratio (SMR) for each latency group. To determine if 10 years latency is indeed needed to develop ASL, we split latency into the two categories: <10 years and 10+ years latency. Follow-up was virtually complete. Five cases of cancer were observed in the <10 year latency group and 35 cases were observed in the 10+ year latency group. Assuming a criterion of 5-years’ exposure, total person-years at-risk for disease in the actual cohort are shown by age in the following table for persons with less than and more than 10 years' latency. Included for your use in calculating expected number of deaths per person-years at-risk in each age group are 1965 age-specific mortality rates for cancers of all sites in U.S. white males.

Table 4 (next page) was constructed by a method analogous to Table 2, that is by adding up the person-years at risk for all 1294 workers with at least 5 years of exposure, regardless of latency.

Table 4. Standardized Mortality Ratio for Cancer-Related Deaths

Person-Years At-Risk for Expected\*

Disease for Workers with Age Specific Expected Number

> 5 Years Exposure and Cancer Mortality of Cancer Deaths Latency of Rate / 100,000 / yr For Latency of

Age <10 years 10+ years <10 years 10+ years

20-29 8444 38 13  **1.10**\_\_\_\_\_ **0.005**\_\_\_\_

30-39 4619 3065 28 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

40-49 2180 5668 91 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

50-59 508 2681 300 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

60-69 40 1078 712 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

70-79 0 171 1223 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

80+ 0 20 1710 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Total expected deaths \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

Total observed deaths \_\_\_5\_\_\_\_ \_\_\_35\_\_\_

SMR \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

SMR (O/E x 100) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

\* Expected deaths adjusted for cause and calendar year.