Absence of Mesothelioma Risk Maintained in an Expanded International Cohort of Cosmetic Talc Miners and Millers

Using information from a recent study of a Vermont cosmetic talc miner/miller cohort, including a reported case of mesothelioma, this case study updates the prior pooled statistical power analyses of mesothelioma incidence among European cosmetic talc miners/millers. The pooled analysis was expanded to include over 17,000 people, along with the inclusion of the Vermont cohort.

The cosmetic talc miner/miller pooled cohort studies were led in Italy, Norway, France, Austria, and Vermont. The projected numbers of mesothelioma cases for each cohort as reported in this study were used. The statistical power analysis was based on an a priori one-sided significance level of 0.05 and Poisson distribution probabilities.

The results found that the pooled cohorts had 59% and 78% power to detect a 2.5-fold or greater and a 3.0-fold or greater increase in mesothelioma, respectively. The work history characteristics of the one mesothelioma case, which included mention of prior asbestos exposure on the case's death certificate, do not support a causal link with cosmetic talc exposure.

The conclusion of the case study found that in spite of the recent finding of one case of mesothelioma in the Vermont cohort (a case unlikely related to talc exposure), the epidemiological evidence from the cosmetic talc miner/miller cohort studies does not support the hypothesis that cosmetic talc exposures are associated with an increased risk of pleural mesothelioma.