**S1 Table**. Description of variables used for the analysis

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| **Variable type** | **Name of variable** | **Description of variable** |
| Fixed | Sex | 1:Males | 2:Females |
| Fixed | Calendar period of birth | 1:<19102:1910–19193:1920–1929 | 4:1930–19395:1940–19496:1950+ |
| Fixed | First year of employment | 1:1948–19532:1954–19583:1959–19634:1964–1968 | 5:1969–19726:1973–19787:1979–1982 |
| Fixed | Age at first employment | 1:<202:20–243:25–29 | 4:30–345:35–396:40+ |
| Fixed | Hypertension | 1: unknown 2: without hypertension | 3: hypertension  |
| Fixed | Body mass index | 1: unknown2: <normal | 3: normal4: >normal |
| Fixed | Glaucoma | 1: Free from glaucoma2: Diagnosed with glaucoma |  |
| Fixed | High myopia | 1: Free from high myopia2: Diagnosed with myopia |  |
| Fixed | Diabetes | 1: Free from diabetes2: Diagnosed with diabetes |  |
| Fixed | Smoking status | 1: Non-smokers2: Ex-smokers | 3: Smokers4: unknown |
| Fixed | Alcohol consumption | 1: Never-drinkers2: Ever-drinkers | 3: unknown |
| Time varying | Attained age categories | 1: 15–202: 20–253: 25–304: 30–355: 35–406: 40–457: 45–508: 50–55 | 9: 55–6010: 60–6511: 65–7012: 70–7513: 75–8014: 80–8515: 85+ |
| Time varying | Calendar time categories | 1: 1947–19502: 1951–19553: 1956–19604: 1961–19655: 1966–19706: 1971–19757: 1976–1980 | 8: 1981–19859: 1986-199010: 1991–199511: 1996–200012: 2001–200513: 2006–2008 |
| Time dependent | Smoking index (pack\*years) categories | 1: =0 (non-smokers)2: unknown3: <10 | 4: 10–205: >20 |
| Time dependent | Cumulative external γ dose (Sv) categories | 1: 0–0.252: 0.25–0.503: 0.50–0.754: 0.75–1.00 | 5: 1.00–1.256: 1.25–1.507: 1.50–2.008: >=2.00 |
| Time dependent | Dose from neutrons (Gy) categories | 1: unknown2: <0.013: 0.01–0.005 | 4: >0.05 |
| Calculated | Attained age | Person-year weighted mean attained age in years |
| Cumulative external γ dose, Sv | Person-year weighted mean cumulative gamma dose  |
| PYR | Person years at risk |
| Case counts | Cataract | Cataracts (ICD-9: 366.0) |