Supplementary Table 1. Standardized mortality ratios (SMRs) for all causes of death by job title, year of entry, and birth year in South Korean medical radiation workers by sex, 1996-2015

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Male |  | Female |
| Observed deaths | SMR | (95% CI) |  | Observed deaths | SMR | (95% CI) |
| Job title  |  |  |  |  |  |  |  |
|  | Radiologists | 26 | 0.32 | (0.22-0.48) |  | 6 | 0.66 | (0.30-1.46) |
|  | Doctors  | 335 | 0.40 | (0.36-0.45) |  | 19 | 0.70 | (0.45-1.10) |
|  | Dentists | 168 | 0.39 | (0.34-0.46) |  | 16 | 0.54 | (0.33-0.88) |
|  | Dental hygienists  | - | - | - |  | 16 | 0.29 | (0.18-0.47) |
|  | Radiologic technologists  | 204 | 0.41 | (0.36-0.47) |  | 22 | 0.37 | (0.24-0.56) |
|  | Nurses | 3 | 0.64 | (0.21-1.99) |  | 18 | 0.57 | (0.36-0.90) |
|  | Other medical assistants | 238 | 0.77 | (0.68-0.88) |  | 28 | 0.66 | (0.45-0.95) |
| Entry year |  |  |  |  |  |  |  |
|  | <2001 | 600 | 0.45 | (0.41-0.48) |  | 58 | 0.55 | (0.42-0.71) |
|  | 2001-2005 | 261 | 0.49 | (0.43-0.55) |  | 49 | 0.58 | (0.43-0.76) |
|  | >2005 | 113 | 0.42 | (0.35-0.51) |  | 18 | 0.28 | (0.18-0.45) |
| Year of birth |  |  |  |  |  |  |  |
|  | <1960 | 618 | 0.51 | (0.47-0.55) |  | 21 | 0.69 | (0.45-1.05) |
|  | 1960-1969 | 239 | 0.35 | (0.31-0.40) |  | 41 | 0.58 | (0.43-0.79) |
|  | 1970-1979 | 98 | 0.44 | (0.36-0.54) |  | 43 | 0.43 | (0.32-0.57) |
| 　 | ≥1980 | 19 | 0.50 | (0.32-0.78) | 　 | 20 | 0.38 | (0.25-0.59) |

Supplementary Table 2. Relative standardized mortality ratios (rSMRs) for all cancers by job title, year of entry, and birth year in South Korean medical radiation workers by sex, 1996-2015

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Male | 　 | Female |
| Observed cancer | rSMR | (95% CI) | 　 | Observed cancer | rSMR | (95% CI) |
| Job title  |  |  |  |  |  |  |  |
|  | Radiologists | 9 | 1.14 | (0.45-2.71) |  | 3 | 1.46 | (0.20-10.88) |
|  | Doctors  | 156 | 1.80 | (1.44-2.24) |  | 10 | 1.72 | (0.63-4.79) |
|  | Dentists | 79 | 2.11 | (1.54-2.89) |  | 9 | 1.97 | (0.65-6.23) |
|  | Dental hygienists  | - | - | - |  | 7 | 2.23 | (0.70-6.71) |
|  | Radiologic technologists  | 65 | 1.43 | (1.05-1.93) |  | 9 | 1.73 | (0.65-4.38) |
|  | Nurses | - | - | - |  | 7 | 1.40 | (0.46-3.96) |
|  | Other medical assistants | 87 | 1.18 | (0.90-1.55) |  | 11 | 1.20 | (0.51-2.72) |
| Entry year |  |  |  |  |  |  |  |
|  | <2001 | 248 | 1.53 | (1.30-1.81) |  | 29 | 1.69 | (0.98-2.93) |
|  | 2001-2005 | 99 | 1.46 | (1.13-1.89) |  | 20 | 1.55 | (0.83-2.84) |
|  | >2005 | 51 | 2.04 | (1.38-3.01) |  | 7 | 1.76 | (0.58-4.97) |
| Year of birth |  |  |  |  |  |  |  |
|  | <1960 | 284 | 1.40 | (1.19-1.64) |  | 12 | 1.71 | (0.66-4.60) |
|  | 1960-1969 | 91 | 2.11 | (1.60-2.75) |  | 24 | 1.96 | (1.01-3.88) |
|  | 1970-1979 | 20 | 1.43 | (0.83-2.36) |  | 15 | 1.25 | (0.62-2.42) |
| 　 | ≥1980 | 3 | 1.66 | (0.31-5.81) | 　 | 5 | 1.56 | (0.44-4.52) |