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Lung cancer in Mayak workers: interaction of smoking and plutonium exposure

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Unfortunately, the article was published with some errors. The correct parts are given here.

1. First sentence of paragraph before equation (2): Let s be the smoking status (1 if smoking, 0 if not smoking), $d_{\text{ext},j}$ and $d_{\text{int},j}$ the annual external and internal dose in the j -th year of exposure, respectively, and b_j the year of birth.

2. Equation (9):

$$\delta_i = \left\{ \int_{t_{mi}}^{t_{2i}} [(h_i(t)/h_{b,i}(t) - 1)/D_i(t - t_{\text{lag}})] dt \right\} / (t_{2i} - t_{mi}), \quad (9)$$

3. Last paragraph of section *Model parameters* in the Chapter *Discussion*: the upper confidence bound -11.2 of q'_0 implies an upper bound of the malignant transformation rate μ_0 of $1.4 \times 10^{-5} \text{ a}^{-1}$. This value is consistent with the range of upper bounds ($3 \times 10^{-6} - 1 \times 10^{-4} \text{ a}^{-1}$) as derived from other analyses of lung cancer with the TSCE model [16].
4. Table 5:

Table 5 Fit parameters for models 1 and 2: best estimates, 68% confidence ranges, and type of distribution assumed in the calculation of the excess relative risk

Fit parameter	Model 1	Model 2
X'_0 ^a	−16.0 (−16.9; −15.2) N	−17.9 (−18.8; −17.0) N
X_{sm}	—	8.8 (6.1; 13.1) LN
X_{ext} (year Sv ^{−1})	6.0 (−0.1; 15.1) N	1.0 (−13.9; 18.7) N
X_{int} (year Sv ^{−1}) ^b	—	54.6 (33.5; 80.1) N
X_{by}	0.096 (0.044; 0.232) LN	0.056 (0.021; 0.142) LN
γ_0 (year ^{−1})	0.0804 (0.0647; 0.0955) N	0.142 (0.129; 0.156) LN
γ_{sm} (year ^{−1})	0.0616 (0.0526; 0.0718) LN	—
γ_{lev} (year ^{−1})	0.422 (0.344; 0.528) LN	—
γ_{int} (Sv ^{−1}) ^b	0.107 (0.089; 0.129) LN	—
q'_0 ^c	−11.7 (−12.2; −11.2) N	−11.5 (−12.1; −10.8) N
μ_{int} (year Sv ^{−1}) ^b	—	1.17 (0.54; 2.47) LN

N normal, LN lognormal distribution

^aExp(X'_0) has unit year^{−2}

^bAssuming a radiation weighting factor of 20 for plutonium

^cExp(q'_0) has unit year^{−1}

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