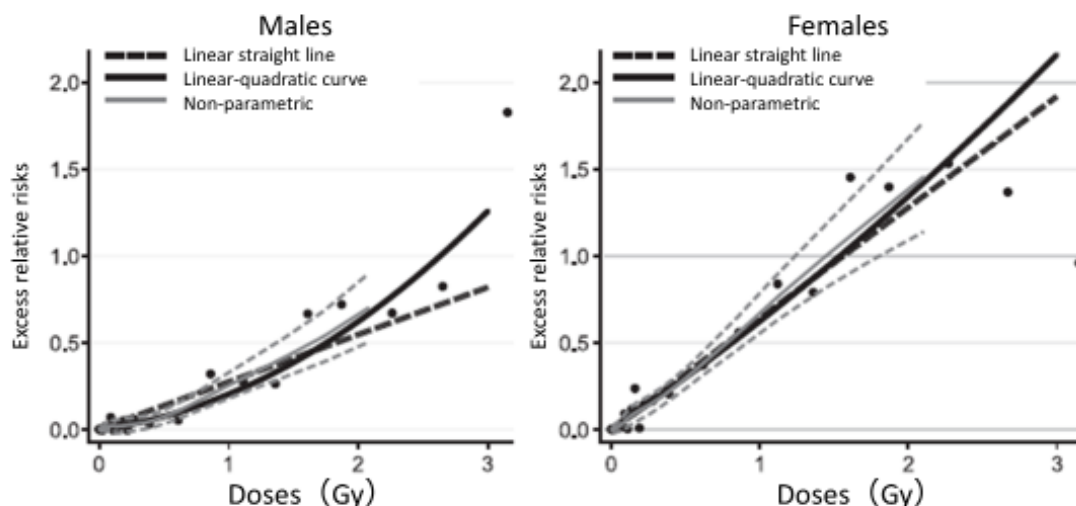


Data on Atomic
Bomb Survivors



Deaths from solid cancer (results among atomic bomb survivors)



Source: Prepared based on Grant *et al.*, *Radiat Res*, 187, 513-537, 2017

Excess relative risks: How cancer risks have increased among a group of people exposed to radiation compared with a group of non-exposed people

Health effects surveys targeting atomic bomb survivors have revealed that cancer risks increase as exposure doses increase. The latest epidemiological survey on solid cancer risks shows proportionate relationships between doses and risks, i.e., between exposure doses exceeding 100 mSv and the risk of solid cancer incidence¹ and between exposure doses exceeding 200 mSv and the risk of death from solid cancer.²

However, there is no consensus among researchers concerning a relationship between cancer risks and exposure doses below 100 to 200 mSv. It is expected to be clarified in future studies whether a proportionate relationship can be found between cancer risks and all levels of exposure doses, whether there is any substantial threshold value, or whether any other correlations are found.

(Related to p.99 of Vol. 1, “Relative Risks and Attributable Risks,” and p.166 of Vol. 1, “Disputes over the LNT Model”)

1. E. J. Grant *et al.*, “Solid Cancer Incidence among the Life Span Study of Atomic Bomb Survivors: 1958-2009” *RADIATION RESEARCH* 187, 513-537 (2017)
2. K. Ozasa *et al.*, “Studies of the Mortality of Atomic Bomb Survivors, Report 14, 1950-2003: An Overview of Cancer and Noncancer Diseases” *RADIATION RESEARCH* 177, 229-243 (2012)

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