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LETTER TO THE EDITOR

Update: History of radiation detriment and its calculation methodology used in ICRP Publication 103 (2019 J. Radiol. Prot. 39 R19–R35)

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We are writing this letter on behalf of ICRP Task Group 102 on Radiation Detriment Calculation Methodology. Part of the Task Group's outcome was published in this journal as 'History of radiation detriment and its calculation methodology used in ICRP Publication 103' (Cléro *et al* 2019). However, we later came to know that the calculation condition in this review article (called 'the article' hereafter) (Cléro *et al* 2019) was slightly different from that of ICRP Publication 103 (ICRP 2007).

Specifically, we computed lifetime risks for each age of 0 to 84 years at exposure in the article (Cléro *et al* 2019), where the risk was cumulated up to the attained age of 89 years. In Publication 103, the computation was made for age-at-exposure groups of 0–4, 5–9, ..., 85–89 years, and the risk was cumulated up to the attained-age group of 90–94 years. What matters is not the difference in age interval, but the difference in age range covered in the calculation.

There were also misinterpretations of the risk models. For female breast, we used a model of Preston *et al* (Preston *et al* 2002) in the article (Cléro *et al* 2019) as the model given in Annex A of Publication 103 did not reproduce the nominal risk coefficient. Later, it turned out that a similar but different model was developed in Publication 103. For leukaemia, the article (Cléro *et al* 2019) took the description of Publication 103 for granted, but the risk model remained unclear. Again, we later came to know that an unpublished model was used in Publication 103, and moreover, the minimum latency period was not 2 years, but 5 years.

Although the impact on the calculation result is limited, these findings have been reflected in the final report of the Task Group, which will go out as ICRP Publication 152 (ICRP 2022). Our upcoming paper (Ban *et al* 2022) summarises the points of Publication 152, in which the methodological changes from the article (Cléro *et al* 2019) are briefly mentioned.

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