

1) Published and in-press reports (2020 - Current):**<2022 – Current>**

Sposto R, Cordova KA, Hamasaki K, Nakamura N, Noda A, Kodama Y. The association of radiation exposure with stable chromosome aberrations in atomic bomb survivors based on DS02R1 dosimetry and FISH methods. *Radiat Res.* 2023; 1-12. [*Mbs*]

Brenner AV, Preston DL, Sakata R, Cologne JB, Sugiyama H, Utada M, Cahoon EK, Grant EJ, Mabuchi K, Ozasa K. Comparison of all solid cancer mortality and incidence dose-response in the Life Span Study of atomic bomb survivors, 1958-2009. *Radiat Res.* 2022; 197(5):491-508. [*Lss*]

Cologne JB, Sugiyama H, Hamasaki K, Tatsukawa Y, French B, Sakata R, Misumi M. Chromosome aberrations among atomic-bomb survivors exposed in utero: Updated analysis accounting for revised radiation doses and smoking. *Radiat Environ Biophys.* 2022; 61(1):59-72. [*Ahs*]

Hamasaki K, Matsumoto T, Cologne JB, Mukai M, Kodama Y, Noda A, Nakamura N. Translocations are induced in hematopoietic stem cells after irradiation of fetal mice. *J Radiat Res.* 2022; rrac078:1-6. [*Mbs*]

Ishihara K, Kato N, Misumi M, Kitamura H, Hida A, Yamada M. Radiation effects on late-life neurocognitive function in childhood atomic bomb survivors: A Radiation Effects Research Foundation Adult Health Study. *Radiat Res.* 2022; 197(4):403-7. [*Ahs*]

Little MP, Brenner AV, Grant EJ, Sugiyama H, Preston DL, Sakata R, Cologne JB, Velazquez-Kronen R, Utada M, Mabuchi K, Ozasa K, Olson JD, Dugan GO, Pazzaglia S, Cline JM, Applegate KE. Age effects on radiation response: Summary of a recent symposium and future perspectives. *Int J Radiat Biol.* 2022; 1-34.

Noma H, Misumi M, Tanaka S. Risk ratio and risk difference estimation in case-cohort studies. *J Epidemiol.* 2022; 1-15. [*Sd*]

Ohishi M, Yamamura M, Yanagihara H. Coordinate descent algorithm of generalized fused Lasso logistic regression for multivariate trend filtering. *Japanese Journal of Statistics and Data Science.* 2022; 1-17. [*Smnos*]

Tatsukawa Y, Cordova KA, Yamada M, Ohishi W, Imaizumi M, Hida A, Sposto R, Sakata R, Fujiwara S, Nakanishi S, Yoneda M. Incidence of diabetes in the atomic bomb survivors: 1969-2015. *J Clin Endocrinol Metab.* 2022; 107(5):e2148-55. [*Ahs*]

Yoshida K, Satoh Y, Uchimura A, Misumi M, Kyoizumi S, Taga M, Matsuda Y, Noda A, Kusunoki Y. Massive expansion of multiple clones in the mouse hematopoietic system long after whole-body X-irradiation. *Sci Rep.* 2022; 12(1):17276. [*Mbs*]

<In press>

Sposto R, Sugiyama H, Tsuruyama T, Brenner A. Effect of radiation exposure on survival after solid tumor diagnosis in A-bomb survivors. *Cancer Epidemiology*. [*Lss*]

<Submitted>

Domal SJ, Correa-Alfonso CM, Paulbeck CJ, Griffin KT, Sato T, Funamoto S, Cullings HM, Egbert SD, Endo A, Hertel NE, Lee C, Bolch WE. Fetal and maternal atomic bomb survivor dosimetry using the J45 series of pregnant female phantoms: Consideration of the kneeling and lying posture with comparisons to the DS02 system. *Health Physics*. [*Dos*]

Kitamura H, Ishihara K, Kato N, Misumi M, Hida A. Neurocognitive Function in Aged Survivors Exposed to Atomic Bomb Radiation in Utero: The Radiation Effects Research Foundation Adult Health Study. *Radiation Research*. [*Ahs*]

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Hamasaki K, Yoshida K, Noda A, Tanabe O. Spectra and characteristics of somatic mutations induced by ionizing radiation in hematopoietic stem cells. *PNAS*. [*Mbs*]

Paulbeck CJ, Sato T, Funamoto S, Lee C, Griffin K, Cullings HM, Egbert SD, Endo A, Hertel N, Bolch WE. Fetal and maternal atomic bomb survivor dosimetry using the J45 series of pregnant female phantoms with realistic exposure scenarios. *Radiation Environmental Biophysics*. [*Dos*]

Tsai K, Brenner A, Sugiyama H, Utada M, Morenz E, Carone M, French B, Phipps A. Effect Modification by Reproductive Factors on Radiation-Related Lung Cancer Risk among Atomic Bomb Survivors. *Radiation Research*. [*Lss*]

<In Development>

Cologne JB, Misumi M, Kadowaki Y, Nakamizo T, Araki Y. Association of Adult Body Weight Trajectories with Mortality in a Japanese Clinical Cohort: Analysis via Joint Latent Class Mixed Models. [*Target Journal - TBD*]. [*Ahs*]

Domal SJ, Correa-Alfonso CM, Paulbeck CJ, Griffin KT, Sato T, Funamoto S, Cullings HM, Egbert SD, Endo A, Hertel NE, Lee C, Bolch WE. A reassessment of the partial body shielding of the Nagasaki factory workers in the LSS cohort using the J45 computational phantoms. [*Target Journal - Radiation Research*]. [*Dos*]

Liu Z, Cologne JB, Amundson SA, Noda A. Candidate Biomarkers and Long-term Transcriptional responses over low and high dose ionizing radiation. [*Target Journal - International Journal of Radiation Biology*]. [*Smnos*]

Liu Z, Nakamizo T, Cologne JB, Misumi M, Ono S. Deep Learning for Radiation Risk Prediction of A-bomb Survivors. [*Target Journal - TBD*]. [*Smnos*]

Misumi M, Furukawa K. Multi-dimensional smoothing for age trends of radiation effects on the cancer risk of Japanese. [*Target Journal - TBD*]. [*Drm, lss*]

Nakamizo T, Cologne JB, Kishi T, Takahashi T, Inoue M, Ryukaku H, Hayashi T, Kusunoki Y, Fujiwara S, Ohishi W. Reliability, stability during long-term storage, and intra-individual fluctuation of the serum levels of osteopontin, osteoprotegerin, vascular endothelial growth factor-A, and interleukin-17A. [*Target Journal - TBD*]. [*Ahs*]

Ohishi W, Cologne JB, Kim YM, Fujiwara S, Tsuge M, Chayama K. Mediation by Hepatitis Viruses of the Radiation-related Risk of Liver Cancer. [*Target Journal - International Journal of Cancer or European Journal of Epidemiology*]. [*Ahs*]

<2021 >

Amano MA, French B, Sakata R, Dekker M, Brenner AV. Lifetime risk of suicide among survivors of the atomic bombings of Japan. *Epidemiol Psychiatr Sci*. 2021; 30(e43). [*Lss*]

Bockwoldt B, Sugiyama H, Tsai K, Bhatti P, Brenner AV, Hu A, Kerr KF, Morenz E, French B, Phipps AI. Gastrointestinal cancer survival and radiation exposure among atomic bomb survivors: The Life Span Study. *Cancer Epidemiol Biomarkers Prev*. 2021; 30(2):412-8. [*Lss*]

Grant EJ, Yamamura M, Brenner AV, Preston DL, Utada M, Sugiyama H, Sakata R, Mabuchi K, Ozasa K. Radiation risks for the incidence of kidney, bladder and other urinary tract cancers: 1958-2009. *Radiat Res*. 2021; 195(2):140-8. [*Lss*]

Griffin KT, Sato T, Funamoto S, Chizhov K, Domal S, Paulbeck C, Bolch W, Cullings HM, Egbert S, Endo A, Hertel N, Lee C. Japanese pediatric and adult atomic bomb survivor dosimetry: Potential improvements using the J45 phantom series and modern Monte Carlo transport. *Radiat Environ Biophys*. 2021; 1-14. [*Dos*]

Haruta D, Landes RD, Hida A, Imaizumi M, Ohishi W, Akahoshi M, Maemura K. Relationship between radiation exposure and incident atrial fibrillation among atomic bomb survivors. *Circulation Reports*. 2021; 3(7):381-7. [*Ahs*]

Hayashi T, Furukawa K, Morishita Y, Hayashi I, Kato N, Yoshida K, Kusunoki Y, Kyoizumi S, Ohishi W. Intracellular reactive oxygen species level in blood cells of atomic bomb survivors is increased due to aging and radiation exposure. *Free Radical Biol Med*. 2021; 171(126-34). [*Mbs*]

Hida A, Imaizumi M, French B, Ohishi W, Haruta D, Eguchi K, Nakamura H, Kawakami A. Association of human T-cell leukemia virus type 1 with prevalent rheumatoid arthritis among atomic bomb survivors--A cross-sectional study. *Medicine*. 2021; 100(24):e26297. [Ahs]

Hirahara N, Miyata H, Kato N, Hirata Y, Murakami A, Motomura N. Development of bayesian mortality categories for congenital cardiac surgery in Japan. *Ann Thorac Surg*. 2021; 112(3):839-45.

Hu A, French B, Sakata R, Bhatti P, Bockwoldt B, Grant EJ, Phipps A. The possible impact of passive smoke exposure on radiation-related risk estimates for lung cancer among women: The Life Span Study of atomic bomb survivors. *Int J Radiat Biol*. 2021; 97(11):1548-54. [Lss]

Kaiser JC, Misumi M, Furukawa K. Biologically-based modeling of radiation risk and biomarker prevalence for papillary thyroid cancer in Japanese a-bomb survivors 1958 - 2005. *Int J Radiat Biol*. 2021; 97(1):19-30. [Mm]

Kato N, Noma H, Nagashima K. Optimal ranking and selection for large-scale inference: Application of Bayesian hierarchical mixture modeling. *Keisanki Toukeigaku*. 2021; 32(2):105-17.

Little MP, Wakeford R, Zablotska LB, Borrego D, Griffin K, Allodji R, de Vathaire, Lee C, Brenner AV, Miller JS, Campbell D, Sadetzki S, Doody MM, Holmberg E, Lundell M, Adams MJ, French B, Linet MS, de Gonzalez. Lymphoma and multiple myeloma in cohorts of persons exposed to ionising radiation at a young age. *Leukemia*. 2021; 35(10):2906-16. [Lss]

Mabuchi K, Preston DL, Brenner AV, Sugiyama H, Utada M, Sakata R, Sadakane A, Grant EJ, French B, Cahoon EK, Ozasa K. Risk of prostate cancer incidence among atomic bomb survivors: 1958-2009. *Radiat Res*. 2021; 195(1):66-76. [Lss]

Nakamizo T, Cologne JB, Cordova KA, Yamada M, Takahashi T, Misumi M, Fujiwara S, Matsumoto M, Kihara Y, Hida A, Ohishi W. Radiation effects on atherosclerosis in atomic bomb survivors: A cross-sectional study using structural equation modeling. *Eur J Epidemiol*. 2021; 36(4):401-14. [Ahs]

Sugiyama H, Misumi M, Sakata R, Brenner AV, Utada M, Ozasa K. Mortality among individuals exposed to atomic bomb radiation in utero; 1950-2012. *Eur J Epidemiol*. 2021; 36(4):415-28. [Lss]

Utada M, Brenner AV, Preston DL, Cologne JB, Sakata R, Sugiyama H, Kato N, Grant EJ, Cahoon EK, Mabuchi K, Ozasa K. Radiation risk of ovarian cancer in atomic bomb survivors: 1958-2009. *Radiat Res*. 2021; 195(1):60-5. [Lss]

Yamada M, Furukawa K, Tatsukawa Y, Marumo K, Funamoto S, Sakata R, Ozasa K, Cullings HM, Preston DL, Kurttio P. Yamada et al. Respond to "Radiation and Reproductive Health". *Am J Epidemiol*. 2021; 190(11):2337-8. [Ahs]

Yamada M, Furukawa K, Tatsukawa Y, Marumo K, Funamoto S, Sakata R, Ozasa K, Cullings HM, Preston DL, Kurttio P. Congenital malformations and perinatal deaths among the children of atomic bomb survivors: A reappraisal. *Am J Epidemiol*. 2021; 190(11):2323-33. [Ahs]

Yamada M, Kato N, Kitamura H, Ishihara K, Hida A. Cognitive function among elderly survivors prenatally exposed to atomic bombings. *Am J Med*. 2021; 134(4):e264-7. [Ahs]

Yamamura M, Ohishi M, Yanagihara H. Spatio-temporal adaptive fused lasso for proportion data. *Intelligent Decision Technologies--Proceedings of the 13th KES-IDT 2021 Conference*. 2021; (pp 479-89). [Spa]

Yoshida K, Misumi M, Kusunoki Y, Yamada M. Longitudinal changes in red blood cell distribution width decades after radiation exposure in atomic-bomb survivors. *Br J Haematol*. 2021; 193(2):406-9. [La, ahs]

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Brenner AV, Sugiyama H, Preston DL, Sakata R, French B, Sadakane A, Cahoon EK, Utada M, Mabuchi K, Ozasa K. Radiation risk of central nervous system tumors in the Life Span Study of atomic bomb survivors, 1958-2009. *Eur J Epidemiol*. 2020; 35(6):591-600. [Lss]

Cologne JB, Sugiyama H, French B, Cullings HM, Preston DL, Mabuchi K, Ozasa K, Grant EJ. Response to the letter to the editor by Drs. Walsh and Schneider. *Radiat Res*. 2020; 194(1):101. [Drm]

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Fukui K, Ohishi M, Yamamura M, Yanagihara H. A fast optimization method for additive model via partial generalized ridge regression. *Intelligent Decision Technologies--Proceedings of the 12th KES-IDT 2020 Conference*. 2020; pp279-90. [Spa]

Kim YM, Cologne JB, Jang E, Lange T, Tatsukawa Y, Ohishi W, Utada M, Cullings HM. Causal mediation analysis in nested case-control studies using conditional logistic regression. *Biometrical J.* 2020; 62(8):1939-59. [*Ci*]

Little MP, Pawel DJ, Misumi M, Hamada N, Cullings HM, Wakeford R, Ozasa K. Lifetime mortality risk from cancer and circulatory disease predicted from the Japanese atomic bomb survivor Life Span Study data taking account of dose measurement error. *Radiat Res.* 2020; 194(3):259-76. [*Lss, me*]

Misumi M. Introduction of radiation epidemiology and a Japan-US research institute. *Nihon Keiryō Seibutsu Gakkai Kaihou.* 2020; (132):7-8.

Sato T, Funamoto S, Paulbeck C, Griffin K, Lee C, Cullings HM, Egbert SD, Endo A, Hertel N, Bolch WE. Dosimetric impact of a new computational voxel phantom series for the Japanese atomic bomb survivors: Methodological improvements and organ dose response functions. *Radiat Res.* 2020; 194(4):390-402. [*Dos*]

Satoh Y, Asakawa J, Nishimura M, Kuo T, Shinkai N, Cullings HM, Minakuchi Y, Sese J, Toyoda A, Shimada Y, Nakamura N, Uchimura A. Characteristics of induced mutations in offspring derived from irradiated mouse spermatogonia and mature oocytes. *Sci Rep.* 2020; 10(1):37. [*Mbs*]

Sugiyama H, Misumi M, Brenner AV, Grant EJ, Sakata R, Sadakane A, Utada M, Preston DL, Mabuchi K, Ozasa K. Radiation risk of incident colorectal cancer by anatomical site among atomic bomb survivors: 1958-2009. *Int J Cancer.* 2020; 146(3):635-45. [*Lss*]

Takahashi N, Misumi M, Murakami H, Niwa Y, Ohishi W, Inaba T, Nagamachi A, Suzuki G. Association between low doses of ionizing radiation, administered acutely or chronically, and time to onset of stroke in a rat model. *J Radiat Res.* 2020; 61(5):666-73. [*Mbs*]

Takahashi N, Misumi M, Niwa Y, Murakami H, Ohishi W, Inaba T, Nagamachi A, Tanaka S, Tanaka I, Suzuki G. Effects of radiation on blood pressure and body weight in the spontaneously hypertensive rat model. Are radiation effects on blood pressure affected by genetic background? *Radiat Res.* 2020; 193(6):552-9. [*Mbs*]

Terui K, Hirahara N, Tachimori H, Kato N, Fujishiro J, Watanabe E, Tomita H, Okamoto T, Fujiogi M, Okamoto S, Yonekura T, Miyata H, Usui N. Development and validation of risk models for mortality and morbidity in 12 major pediatric surgical procedures: A study from the National Clinical Database-Pediatric of Japan. *J Pediatr Surg.* 2020; 55(10):2064-70.

Ueda K, Ohishi W, Cullings HM, Fujiwara S, Suzuki G, Hayashi T, Mitsui F, Hida A, Ozasa K, Ito M, Chayama K, Tahara E. Modifying effect of chronic atrophic gastritis on radiation risk

for noncardia gastric cancer according to histological type. *Radiat Res.* 2020; 194(2):180-7. [*Nos*]

Meeting Presentations (January 2022 - December 2022):

Kadowaki Y, Furukawa K. Evaluation of the lifetime brain/central nervous system cancer risk associated with childhood head CT scanning in Japan. 32nd Annual Scientific Meeting of the Japan Epidemiological Association. 26-28 January 2022, Chiba

Cullings HM, Bolch W, Funamoto S, Sato T, Lee C, Egbert SD, Hertel N, Griffin K, Paulbeck C. New developments in the dosimetry of the Japanese atomic bomb survivors. Health Physics Society 67th Annual Meeting, 17-21 July 2022, Spokane, Washington, USA

Hayashi T, Kato N, Furukawa K, Imaizumi M, Hida A, Ohishi W. Effects of radiation exposure on reactive oxygen species in blood cells of atomic bomb survivors. 53rd Environmental Mutagenesis and Genomics Society Annual Meeting/13th International Conference on Environmental Mutagens. 27 August – 1 September 2022, Ottawa, Canada

Hamasaki K, Matsumoto T, Cologne JB, Mukai M, Kodama Y, Noda A, Nakamura N. mFISH analysis of hematopoietic stem cells isolated from pregnant mice exposed to X-rays. 65th Annual Meeting of the Japanese Radiation Research Society. 15-17 September 2022, Osaka

Hayashi T, Kato N, Maki M, Morishita Y, Yoshida N, Ohishi W. Preliminary study of the applicability of DNA extracted from blood smears to genomic studies. 65th Annual Meeting of the Japanese Radiation Research Society. 15-17 September 2022, Osaka

Matsuda Y, Uchimura A, Satoh Y, Kato N, Toshishige M, Kajimura J, Kubo Y, Yamaoka M, Hamasaki K, Yoshida K, Noda A, Tanabe O. Frequencies and characteristics of somatic mutations induced by X-irradiation in mouse hematopoietic stem cells. 65th Annual Meeting of the Japanese Radiation Research Society. 15-17 September 2022, Osaka

Yoshida K, Satoh Y, Uchimura A, Kyoizumi S, Misumi M, Koyama K, Nagamura H, Yamaoka M, Kubo Y, Toshishige M, Taga M, Matsuda Y, Noda A, Kusunoki Y. Somatic deletion mutations characterize clonal hematopoiesis in X-irradiated mice. 65th Annual Meeting of the Japanese Radiation Research Society. 15-17 September 2022, Osaka

Kusunoki Y, Kyoizumi S, Satoh Y, Uchimura A, Misumi M, Taga M, Matsuda Y, Noda A, Yoshida K. Clonal hematopoiesis and blood cell count in mice long after sublethal whole-body X-irradiation. 84th Annual Meeting of the Japanese Society of Hematology. 14-16 October 2022, Fukuoka

Brenner AV, Preston DL, Sugiyama H, Cologne JB, Sakata R, Grant EJ, Utada M, Sposto R, Ozasa K, Mabuchi K. Joint analyses of cancer site-specific radiation risks in the Life Span Study: 1958-2009. 68th Annual Meeting of the Radiation Research Society. 16-19 October 2022, Hawaii, USA

Grant EJ, Brenner AV, Sugiyama H, Sakata R, Sadakane A, Utada M, Cahoon EK, Milder CM, Soda M, Cullings HM, Preston DL, Mabuchi K, Ozasa K. Sex-specific differences in radiation risks of the incidence of solid cancers in the Life Span Study: 1958-2009. 68th Annual Meeting of the Radiation Research Society. 16-19 October 2022, Hawaii, USA

Kadowaki Y, Furukawa K. Evaluation of the lifetime brain/central nervous system cancer risk associated with childhood head CT scanning in Japan. 68th Annual Meeting of the Radiation Research Society. 16-19 October 2022, Hawaii, USA

Sposto R, Cordova KA, Hamasaki K, Nakamura N, Noda A, Kodama Y, Liu Z. The association of radiation exposure with stable chromosome aberrations in atomic bomb survivors based on DS02R1 dosimetry and FISH methods. 68th Annual Meeting of the Radiation Research Society. 16-19 October 2022, Hawaii, USA

Hayashi T, Kato N, Maki M, Morishita Y, Yoshida N, Ohishi W. SNP analysis of blood smear-derived DNA in two different SNP arrays. 45th Annual Meeting of the Molecular Biology Society of Japan. 30 November – 2 December 2022, Chiba

Hayashi T, Kato N, Furudo K, Kyoizumi S, Furukawa K, Imaizumi M, Hida A, Ohishi W. Effects of radiation exposure on the relationship between intracellular ROS of blood cells and immune-related cell frequencies in atomic bomb survivors. 51st Annual Meeting of the Japanese Society for Immunology. 7-9 December 2022, Kumamoto

Yoshida K, Misumi M, Ohishi W, Hayashi T, Kusunoki Y. Naïve CD4 T cells expressing a high level of CXCR3 increase with age and radiation exposure in atomic-bomb survivors. 51st Annual Meeting of the Japanese Society for Immunology. 7-9 December 2022, Kumamoto