

## VARSKIN+ REFERENCE LIST

- Amato, E.; Italiano, A. Evaluation of skin absorbed doses during manipulation of radioactive sources: a comparison between the VARSKIN code and Monte Carlo simulations. *Journal of Radiological Protection*. 38: 262-272; 2018.
- Anspach, L.; Mangini, C.; Hamby, D. Parametric sensitivity of the VARSKIN dosimetry models. U.S. NRC RAMP. Renaissance Code Development, LLC. Corvallis, OR. September 26, 2019.
- Berger, M.J. Monte Carlo calculation of the penetration and diffusion of fast charged particles. National Bureau of Standards. Washington, DC. 1963.
- Berger, M.J. Improved point kernels for electron and beta-ray dosimetry. Center for Radiation Research. National Bureau of Standards. Washington, DC. February 1973.
- Berger, M.J.; Seltzer, S.M. Tables of energy losses and ranges of electrons and positrons. National Aeronautics and Space Administration. NASA SP-3012. Washington, DC. 1964.
- Bohm, J. Standardisation, calibration and type-testing in skin dosimetry. *Radiation Protection Dosimetry*. 39(1/3): 95-10; 1991.
- Chung, M.; Levine, S.H.; Jester, W.A. Monte Carlo calculation and silicon detector measurement of the hot particle dose. *Health Physics*. 61(6): 843-848; 1991.
- Cipriani, C.; Frisch, B.; Scheidhauer, K.; Desantis, M. Personalized high-dose-rate brachytherapy with non-sealed rhenium-188 in non-melanoma skin cancer. *International Journal of Nuclear Medicine Research*. Special Issue. pp 114-122; June 2017.
- Covens, P.; Berus, D.; Cavelliers, V.; Stuelens, L.; Vanhavere, F.; Verellen, D. Skin dose rate conversion factors after contamination with radiopharmaceuticals: influence of contamination area, epidermal thickness and percutaneous absorption. *Journal of Radiological Protection*. 33: 381-393; 2013.
- Dubeau, J.; Hakmana Witharana, S.; Sun, J.; Heinmiller, B.; Chase, J. A comparison of beta skin doses calculated with VARSKIN 5.3 and MCNP 5. *Radiation Protection Dosimetry*. 182(4); 502-507; 2018.
- Electric Power Research Institute (EPRI). Implementing the EPRI effective dose equivalent (EDE) methodology for discrete radioactive particles on the skin. Report No. 1002823. Palo Alto, CA. October 2004.
- Faw, R.E. Absorbed doses to skin from radionuclide sources on the body surface. *Health Physics*. 63(4): 443-448; 1992.
- Frosio, T.; Bertreix, P.; Koster, U.; Theis, C.; Magistris, M. Spectrum and yield to dose conversion coefficients for beta skin doses linked to the Q system. *Health Physics*. 116(5): 607-618; 2019.

- Guilmette, R.A.; Durbin, P.W.; Toohey, R.E.; Bertelli, L. The NCRP wound model: development and application. *Radiation Protection Dosimetry*. 127(1-4): 103-107; 2007.
- Ishigure, N. Implementation of the NCRP wound model for interpretation of bioassay data for intake of radionuclides through contaminated wounds. *Journal of Radiation Research*. 50: 267-276; 2009.
- International Organization for Standardization (ISO). Radiation protection – monitoring and dosimetry for internal exposures due to wound contamination with radionuclides. ISO 20031:2020(E). Geneva, Switzerland. 2020.
- Klumpp, J.; Bertelli, L.; Dumit, S.; Gadd, M.; Poudel, D.; Waters, T. Response to a skin puncture contaminated with Pu-238 at Los Alamos National Laboratory. *Health Physics*. 119(6): 704-714; 2020.
- Kocher, D.C.; Eckerman, K.F. Electron dose-rate conversion factors for external exposure of the skin from uniformly deposited activity on the body surface. *Health Physics*. 53(2): 135-141; 1987.
- Kwan, I.S.; Rosenfeld, A.B.; Qi, Z.Y.; Wilkinson, D.; Lerch, M.L.F.; Cutajar, D.L.; Safavi-Naeni, M.; Butson, M.; Bucci, J.A.; Chin, Y.; Perevertaylo, V.L. Skin dosimetry with new MOSFET detectors. *Radiation Measurements*. 43: 929-932; 2008.
- Legge, K.; Greer, P.B.; O'Connor, D.J.; Wilton, L.; Richardson, M.; Hunter, P.; Wilfert, A.; Martin, J.; Rosenfeld, A.; Cutajar, D. Real-time in vivo rectal wall dosimetry MOSkin detectors using linac based stereotactic radiotherapy with rectal displacement. *Radiation Oncology*. 12:41; 2017.
- Manabe, K.; Endo, A.; Eckerman, K.F. Impact of the new nuclear decay data of ICRP publication 107 on inhalation dose coefficients for workers. *Radiation Protection Dosimetry*. 138(3): 245-250; 2010.
- Manger, R.P.; Bellamy, M.B.; Eckerman, K.F. Dose conversion coefficients for neutron exposure to the lens of the human eye. *Radiation Protection Dosimetry*. 148(4): 507-513; 2012.
- Mangini, C.D.; Hamby, D.M. Scaling parameters for hot-particle beta dosimetry. *Radiation Protection Dosimetry*. 172(4): 356-366; 2016.
- McWilliams, F.F.; Scannell, M.J.; Soares, C.G.; Coursey, B.M.; Chabot, G.E. Hot particle dosimetry using Co-60 spheres. *Radiation Protection Dosimetry*. 40(4): 223-234; 1992.
- U.S. Nuclear Regulatory Commission (NRC). Calculating dose from a hot particle on the skin – use of one square centimeter area in the calculations. Information Letter. Record #188. Washington, D.C.; January 22, 1987.
- Reece, W.D. Experiences and problems of skin irradiation due to hot particles at workplaces in the United States. *Radiation Protection Dosimetry*. 39(1/3): 165-171; 1991.
- Rohloff, F.; Heinzemann, M. Calculation of dose rates for skin contamination by beta radiation. *Radiation Protection Dosimetry*. 14(4): 279-287; 1986.

- Saeed, A.; Nafee, S.S.; Shaheen, S.A.; Raouf, G.A.; Al-Hadeethi, Y.; Kamal, S.M.; Razvi, M.A.N. Calculating the ambient dose equivalent of fast neutrons using elemental composition of human body. *Applied Mathematics and Computation*. 274: 604-610; 2016.
- Scates, W.W.; Schrader, B.J.; Casanova, K.M. Development of a fission neutron spectrum from a D-T neutron generator by spectrum subtraction technique. *Health Physics*. May 2021. DOI: 10.1097/hp.0000000000001431.
- Shapiro, B.; Pillay, M.; Cox, P.H. Dosimetric consequences of interstitial extravasation following IV administration of a radiopharmaceutical. *European Journal of Nuclear Medicine*. 12: 522-523; 1987.
- Sherbini, S.; DeCicco, J.; Gray, A.; Struckmeyer, R. Verification of the VARSKIN beta skin dose calculation computer code. *Health Physics*. 94(6): 527-538; 2008.
- Spencer, L.V. Energy dissipation by fast electrons. National Bureau of Standards Monograph 1. Washington, D.C. September 10, 1959.
- Sugarman, S.L.; Findley, W.M.; Toohey, R.E.; Dainiak, N. Rapid response, dose assessment, and clinical management of a plutonium-contaminated puncture wound. *Health Physics*. 115(1): 57-64; 2018.
- Taylor, D.C.; Hussein, E.M.A.; Yuen, P.S. Skin dose from radionuclide contamination on clothing. *Health Physics*. 72(6): 835-841; 1997.
- Toohey, R.E.; Bertelli, L.; Sugarman, S.L.; Wiley, A.L.; Christensen, D.M. Dose coefficients for intakes of radionuclides via contaminated wounds. Oak Ridge Institute for Science and Education. Oak Ridge, TN. August 2014.
- Williams, M.C. A method for adding nuclides to VARSKIN and QUINCE skin dose calculation software. *Radiation Protection Management*. 4(6): 25-34; 1987.
- Yu, V.T.; Uryaev, I.A.; Rumyantseva, E.N.; Fominykh, V.I. Metrology of beta radiation dosimetry in the USSR. *Radiation Protection Dosimetry*. 39(1/3): 105-108; 1991.