Molecular-Genetic and Epidemiologic Examination of Personnel Subjected to Occupational Irradiation

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It is given an evaluation of the genetic polymorphisms (Hp, Tf, Gc; 6-PGD, EsD, ACP, PGM1, microsatellite loci CSF1PO и F13AO1, detoxicating genes GSTT1, GSTM1 and GSTP1), individual radiosensitivity (by the criterion of ribosome gene fragments) and DNA-damage rate (Comet-assay) in two cohorts comprised by VNIIEF personnel subjected chronically to gamma-neutron ionizing radiation and to β-radiation of Tritium in comparison with the effects in non-irradiated cohort. There are discussed data on the influence of the occupational irradiation, age and genotype on the rate of structural genome damage, as well as on the activity of the human repair system activity and health status.

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