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PAPER TITLE Development of antiradiation preparation
for radiotherapy and regions of radiation accidents.

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ABSTRACT (See instructions overleaf)

Search for biological active substances for preventive treatment and therapy of radiation influences is still actual. The results of development of preparation for protection of normal tissues on condition of irradiation canceroid's therapy and human organism in the regions of radiation accidents and radionuclides polluted areas are presented. For this purpose effectiveness of synthesized anti-radiation compounds- derivatives of phenilacetophenon, dithiocarbomates and ethylene diamine, antitoxix preparation with adaptogenic properties and antibacterial preparation was studied. These compounds are synthesized on the base of the structure analogues of nature compounds. The famous radioprotector- cystamin- effective on sharp irradiation conditions was used for comparing. BALB-line mice were subjected to chronic gamma-irradiation with dose power 20 Gr during 60 days. Preparation were infused intra peritoneum or per orum every day during the first 30 days. Among them we found the effective preparations which protect BALB-line mice from acute irradiation and had prophylaxis and therapy action on condition of chronic external gamma-irradiation. This preparation increase average life duration on condition of acute irradiation; on condition of chronic irradiation they are slow down the development of leycopenia, reduced lipid peroxide oxidation(LPO), r-protein level and distant citogenetic effects, bringing it close to norm. Animals external appearance, activity and mass normalization seven months later after the experiment.