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### ROLE OF NONSPECIFIC FACTORS OF IMMUNITY IN TREATMENT OF EXPERIMENTAL ARENAVIRAL HEMORRHAGIC FEVER

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An experimental models, BALB/c mice (H-2d haplotype), and C57B1/6 (H-2k haplotype) with an opposite sensibility to Machupo virus infection, CBA/calac mice (H-2k haplotype) and BALB/c (H-2d haplotype) with an opposite sensibility to Lassa were used in the study of the role of nonspecific immunity factors in the infection pathogenesis. We have investigated the activity of TNF, IFN, IL-1, IL-2, natural killers, proliferative activity of splenocytes. Our study allow to determine the negative of immune response mediators on the dynamics of the disease development and on the survival. Our investigations allow significant protection ( $p<0.01$ ) when administered inducter of interferon dsRNA ("RIDOSTIN") mice after inoculated viruses Machupo or Lassa.

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### Theoretical Foundation Optimal Design Criteria of Antiviral Preparations.

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Proceeding from the goal of the application of the antiviral preparations (AVP) - the decrease of the level of the disease in some group of organisms - the system "preparation - method of the application - condition of the application" is determined, which realized the given goal. The mathematical model of functioning of the given system is being designed. A rigorous mathematical analysis of the global efficacy criterion of the system functioning is being made and the optimization criteria of AVP are being derived for the stage of the laboratory design. These criteria take into account the peculiarity of conditions and the way of the application of the preparations. The ones were adapted for using model animals and cellular systems.