



Andrey Belousov

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Biography

Andrey Belousov graduate from Kharkov medical institute in 1988. Doctor of medicine degree on speciality - Anesthesiology and Intensive care since 2004. The title dissertation: "Extracorporeal hemocorrection using magnet-controlled sorbent in intensive therapy of intoxication syndromes in patients with hepato pancreato duodenales diseases". He is associating a new program (PHUAS) for estimation degree the severity of the patient. He published more 190 scientific works on results application of nanotechnology preparation in experimental and practical medicine. Presently he is professor of Kharkov medical academy of post-graduate education, Ukraine.

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NEW EFFECTIVE METHOD FOR PRESERVATION OF RED BLOOD CELLS BY MEANS OF NANOTECHNOLOGY

This study was devoted to the learning of the use of nanotechnology to correct the functional activity of red blood cells (RBCs) at the storage stages at a positive temperature. It was established that saline NaCl, which had previously been processed by magnetite nanoparticles (ICNB) had a marked membrane-stabilizing effect, inhibits haemolysis and increasing the sedimentation stability of preserved RBCs. The complex analysis of the obtained data allowed to determine the primary mechanisms effect of the saline NaCl, which had previously been processed by ICNB on the preserved RBCs. The proposed method of additive modernization of preserved RBCs was adapted to the production process. The optimisation results were obtained in creating a simple and practical method of additive modernization of preservation solutions that does not violate the compliance requirements, improves the quality, efficiency and safety transfusion of RBCs.



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