

ANNOTATION

The theme of my final paper is Cryoconservation of erythrocytes and its use in civilian and military healthcare. This work consist of theoretical part and practical part.

The first part of the thesis introduces cryobiology basics, types of cryoprotectants and the cryopreservation of erythrocytes itself. The thesis describes individual procedural steps leading to the final transfusion product, i.e. methods of blood collection, blood's pre-glycerolisation processing, glycerolisation itself and freezing. Furthermore, it describes issues associated with storage of frozen blood products, as well as with their thawing and deglycerolisation.

The second part, which is practical, deals with quality control of cryopreserved erythrocytes. It describes various quality parameters and acquaints readers with the results of such measured parameters.