

C3.DETERMINATION OF HAEMOGLOBIN THROUGH A NON-INVASIVE METHOD

G.Hanganu, D. Gheorghe, M. Catană, M. Coman

Ploiesti Blood Bank

Introduction The level of hemoglobin Quickly Can be detected in predonation, through a non-invasive method, painless and with no risk of infection. Potential Blood Donors Will no longer have to bear the painful sting of the fingertip. Haemo SPECT ® is a device for measuring extremely suitable for use as a fast and efficient way to intake of Blood Donors.

Material and method

HAEMOSPECT ® is a mobile device, portable, easily Useful to be used everywhere, dedicated to non-invasive measurement of hemoglobin. Ensure measurement without bloodshed in the level of hemoglobin, it is easy to use thanks to the digiclip. That provide measurement reading in a few seconds. It is hygienic, easy-to-use, and reliable without any risk of infection. It is equipped with batteries, therefore, can be used anywhere in the establishments to collect. It is friendly to the environment because it works without supplies, without any replacement of sensors being so extremely economically. The principle of operation of the sensor head is placed on the skin of the donor. A beam of white light from xenon is projected in the donor tissue. A portion of the Projected Light wave is absorbed by the various components of tissue, while some of it is reflected. A guide transmitted reflected light wavelengths, due to the physical condition, back to the device. The by reflection contains information specific to the tissue. This light is guided to the assessment, through the fiber optics, optical sensor That Makes evaluation year and THEN is evaluated by the program. The resulting time algorithm is processed using year and is visualized on the display of your device. The device is powered by batteries. A right smart charger is included in the device, so the Batteries That Will not be overloaded. With Fully Charged batteries, the device can measure at Least Five hours in continuous operation.

Results In the period 15. 02-15-03 were tested in the laboratory of predonation Blood Transfusion Center, with HAEMOSPECT a total of 1,600 aiming Donors and the blood hemoglobin value was determined in parallel using Nihon sampled.

Conclusions Results of the screening Hematology Analyzer in venous hemoglobin with HAEMOSPECT lab for predonare is Useful in screening Donors, is a very well tolerated by the donor, but may not have the precision and accuracy of the determination of venous blood on hematology analyzer.