been obtained and collected, as the initial data. After that, the special questionnaire has been developed, having consisted in ten questions. According to the survey data, the data encoding scheme has already been compiled. One of the «Statistica» presented advantages is, that instead of the numerical data may be displayed and the text data, having obtained by the text editor tags. So, it should be noted, that although the text labels display, the numerical values (e.g. the codes) are practically used at the system analysis carrying out.

So, the frequency table's construction is preceded by many types of the analysis. The frequency tables' construction is also built in the «STATISTICA» system and that by the different methods, depending on the type of the data presentation. In order to be constructed the frequency table, the variables have already been specified, and the categorized diagrams have already been built, corresponding to all these variables. So, there is the possibility to be built more complex diagrams in the «STATISTICA» system, depending on the variables number. So, the crosstabulation obtained results (e.g. the contingency) have been visualized with the categorized diagrams and the 2D-, 3D-diagrams, having selected the required number of the variables. The main purpose of the summary diagrams construction – this is the answer to the question, whether there is any link between the crosstabulated variables. In the most cases, the analysis performing – this has been become clear and reliable. However, much caution is needed in drawing the conclusions on the relationships nature between the variables, having based only on the outward difference between the crosstabulated data [4]. As a result, it can said, that the use of the computer processing methods and the techniques has quite been justified, because this is increased the data reliability level, that can be practically used for the further findings and the correct decisions making.

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NANOMATERIALS BASED ON GAMMA-ALUMINA OF LABELED TECHNETIUM-99M FOR LYMPHOSCINTIGRAPHY

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During recent years a significant increase in interest towards utilizing radioactive colloid nanomaterials in medicine has been registered. Their implementation in oncology is based upon a possibility of a quick and efficient revelation of «guarding» lymphatic knots, and also their ability to mark autolexics in order to diagnose inflammatory processes. Short-life masurium-99m is the most demanded radionuclide as a marker of autolexics. First of all, it is defined by its cellular-physical characteristics: a relatively short T1/2 (6,02 h) and energy of γ-radiation of 0,1405 MeV that provides for a small exposition dose, but also a significant penetration ability that is need for radiometric evaluations.

A defining factor in selection of radioactive indicator for certain researches is a size of colloid particles. Thus, for example, it is known that an optimal size of particles for radionuclide lymphoscintigraphy equals 20–100 nm. Such particles are discharged from tissues with a speed that does not allow them to penetrate blood bed. Particles of size less than 20 nm can easily enter the blood bed. It complicates visualization of lymph nodes.

This works studies processes of placing radioactive mark 99 mTc on aluminium gamma-oxide in presence of a restoration agent of stannum. In order to increase an output of nano-colloid of size up to 100 nm and radiochemical clearness of preparations, we used ascorbic acid, natrium pyrophosphate, and gelatin. Results of medical-biological tests of preparations are provided. The work also shows their functional suitability to carry out radionuclide lymphoscintigraphy.