

Russian researchers have developed a system for forecasting cardiovascular complications in cancer chemotherapy. The technique analyzes 14 biomarkers in the blood and predicts risks with an accuracy of 84%, which allows you to prepare the treatment in advance.

As explained in the Russian Scientific Fund, some antitumor drugs, especially anthracycline, can damage the heart muscle. Scientists under the leadership of Yulia Kirichenko from Sechenov University analyzed blood samples of 59 patients with lymphoma and myeloma, identifying key markers of complications.

According to scientists, they found significant differences in the concentration of certain amino acids and metabolites in patients with and without complications. Particular attention was paid to Serin, Asparagin, Glutamin and Taurin, as well as the compounds of fatty acids.

The method has already helped to identify 18 patients from the risk group before the start of treatment and 15 people with early signs of heart damage after therapy. This made it possible to correctly adjust the dosage and prescribe supportive therapy.