## Mustafa A., Sally A.-H. APPLICATION of CHROMATOGRAPHIC METHODS IN DOPING CONTROL IN SPORTS Tutors: PhD, associated professor Yarantseva N.D., PhD in chemistry, associated professor Belyatsky V. N. Department of pharmaceutical Chemistry, Belarusian State Medical University, Minsk

**Relevance.** In modern time, the prevention of the use of doping is of great importance in top sports achievements. High-resolution chromatography - mass spectrometry, as well as gas and liquid chromatography, fluorescence immunoassay, radioimmunoassay and infrared spectrometry are considered the most informative in doping control.

**The purpose:** the aim of the study was to study the use of chromatographic methods in doping control in sports on the analysis of literature data.

**Results and its discussion.** Doping classification was discussed. Prohibited Classes of Substances, such as the Narcotic substances, Anabolic drugs, Diuretics, Peptide hormones, mimetics and their analogues, Drugs with antiestrogenic activity, Masking drugs have been discussed

**Conclusions**. When conducting doping control, the analysis of low molecular weight compounds is mainly based on the use of chromatographic and mass spectrometric methods.

Liquid chromatography has been mainly used, the separation products of which, after ionization at atmospheric pressure, are subjected to mass spectrometric analysis, since this approach can significantly reduce the sample preparation time and does not require derivatization of the analyzed substances.

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