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Biosimular to lowmolecular heparin of sodium enoxaparin

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Abstract

By UV spectrophotometry, atomic absorption spectrometry, infrared spectrometry, and viscometry we investigated the interaction of heparin with aqueous solutions of benzethonium chloride. Using the method of reversed-phase HPLC the parameters are set for carrying out the process of benzylation of the complex of heparin with quaternary ammonium salt and the content of benzyl alcohol is determined in the ester of heparin. By alkaline depolymerization of benzyl ester of sodium heparin, biosimilar of low molecular heparin of sodium enoxaparin was obtained. Physicochemical properties of molecular weight distribution and biological activity of the compound were defined. We conducted a study on the anticoagulant activity of anti Xa and IIa clotting factors.