

[54] **COMPOSITION FOR DIAGNOSING THE TRANSPORT FUNCTION OF THE FALLOPIAN TUBE AND A METHOD FOR PREPARING SAID COMPOSITION**

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[58] **Field of Search** 424/2, 19, 20, 22, ; 514/964, 953

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[57] **ABSTRACT**

The present invention pertains to a preparation for diagnosing the transport function of the fallopian tube and to a method for making such a preparation.

The diagnostic preparation for investigation of the transport function of female fallopian tube, comprises a suspension of a biocompatible, biodegradable, and, if desired, labelled particles, in a vehicle commonly used for parenteral applications wherein the particles have a spherical shape with diameters in the region 10 to 600 μ m, which are formed from a soft hydrophilic gel based on a polymer selected from the group comprising additionally crosslinked water-soluble nontoxic and biodegradable inert polysaccharides and physiologically inert water-soluble and biodegradable poly(amino acids), polypeptides, and their derivatives, which may contain physiologically active substances. The particles retain their shape and size in the environment of peritoneal cavity and uterotubal tract for at least 80 hours with the subsequent degradation to nontoxic product within 5 to 60 days.

A method for preparation of the diagnostic preparation comprises dispersing an aqueous solution of physiologically inert, biodegradable polymer selected from the group of polysaccharides, poly(amino acids), polypeptides, and their derivatives, in a medium of nonpolar water-immiscible solvent, to 10 wt. % of the polymer having a degree of polymerization of 50 to 500, said suspension containing of 80 to 100 mol. % of γ -alkyl-L-glutamate units and 0 to 20 mol. % units of L-glutamic acid, units as a suspension stabilizer, with mixing sufficient to form polymeric spherical particles with diameter 100 to 600 μ m, which are transferred into the gel state with bifunctional crosslinking agents. The particles are washed and then dispersed in an aqueous solution. The resulting suspension is then sterilized by heat.

9 Claims, No Drawings