**Pharmaceutical products containing protein**

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Development and characterization of protein pharmaceuticals (enzymes, interferons, and living cells) on fibrous polymer carriers and new nano-vehiches, originating from red blood cell’s outer membrane, were carried out. The determination of the structure was based on microspectroscopy and newly introduced small angle X-ray scattering. The development of the experimental methods and models for describing the data were also performed. A new laboratory capacity was developed involving biotechnology from protein production until product formulation. Critical details of technology were studied with invasive and non-invasive methods. The new nano-carriers proved to ensure the stability of the system, rather than traditional parenteral products.

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