

Title (en)  
PROTEIN STABILIZED PHARMACOLOGICALLY ACTIVE AGENTS, METHODS FOR THE PREPARATION THEREOF AND METHODS FOR THE USE THEREOF

Title (de)  
PROTEIN STABILISIERTE PHARMACOLOGISCH AKTIVE WIRKSTOFFE, VERFAHREN ZU DEREN HERSTELLUNG UND METHODEN ZU DEREN ANWENDUNGEN

Title (fr)  
AGENTS A STABILISATION PROTEINIQUE ACTIFS PHARMACOLOGIQUEMENT; PROCEDES DE FABRICATION ET METHODES D'UTILISATION

Publication  
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Application  
**EP 00932669 A 20000519**

Priority  
• US 0013954 W 20000519  
• US 31664299 A 19990521

Abstract (en)  
[origin: WO0071079A2] In accordance with the present invention, there are provided compositions and methods useful for the <i>in vivo</i> delivery of substantially water insoluble pharmacologically active agents (such as the anticancer drug paclitaxel) in which the pharmacologically active agent is delivered in the form of suspended particles coated with protein (which acts as a stabilizing agent). In particular, protein and pharmacologically active agent in a biocompatible dispersing medium are subjected to high shear, in the absence of any conventional surfactants, and also in the absence of any polymeric core material for the particles. The procedure yields particles with a diameter of less than about 1 micron. The use of specific composition and preparation conditions (e.g., addition of a polar solvent to the organic phase), and careful election of the proper organic phase and phase fraction, enables the reproducible production of unusually small nanoparticles of less than 200 nm diameter, which can be sterile-filtered. The particulate system produced according to the invention can be converted into a redispersible dry powder comprising nanoparticles of water-insoluble drug coated with a protein, and free protein to which molecules of the pharmacological agent are bound. This results in a unique delivery system, in which part of the pharmacologically active agent is readily bioavailable (in the form of molecules bound to the protein), and part of the agent is present within particles without any polymeric matrix therein.

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Citation (search report)  
• [X] WO 9814174 A1 19980409 - VIVORX PHARMACEUTICALS INC [US], et al  
• [X] WO 9900113 A1 19990107 - VIVORX PHARMACEUTICALS INC [US], et al  
• [X] SOON-SHIONG ET AL: "Biologic delivery systems: from discovery to clinical application", 1998, PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON CONTROLLED RELEASE BIOACTIVE MATERIALS, PAGE(S) 103-104, ISSN: 1022-0178, XP002125685  
• See references of WO 0071079A2

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**WO 0071079 A2 20001130**; **WO 0071079 A3 20080327**; AU 2006202836 A1 20060727; AU 2006202836 B2 20091008; AU 2009217409 A1 20091008; AU 5035900 A 20001212; AU 784416 B2 20060330; CA 2371912 A1 20001130; CA 2371912 C 20100216; CA 2684454 A1 20001118; EP 1178786 A1 20020213; EP 1178786 A4 20060301; HK 1045646 A1 20021206

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