(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 March 2001 (22.03.2001)

PCT

(10) International Publication Number
WO 01/19339 A1

(51) International Patent Classification[7]: A61K 9/08, 47/40, 31/565, A61P 35/00

(21) International Application Number: PCT/EP00/07680

(22) International Filing Date: 3 August 2000 (03.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9921958.6 16 September 1999 (16.09.1999) GB

(71) Applicant *(for all designated States except US)*: **PHARMACIA & UPJOHN S.P.A.** [IT/IT]; Via Robert Koch, 1.2, I-20152 Milan (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **MUGGETTI, Lorena** [IT/IT]; Via Trento, 38, I-20036 Meda (IT). **COLOMBO, Paolo** [IT/IT]; Via Ludovico Cavaleri, 3, I-20147 Milan (IT). **MARTINI, Alessandro** [IT/IT]; Via Desiderio da Settignano, 14, I-20149 Milan (IT). **BUZZI, Giovanni** [IT/IT]; Via F. Poggi, 14, I-20131 Milan (IT).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *With international search report.*
— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 01/19339 A1

(54) Title: FORMULATIONS FOR PARENTERAL USE OF ESTRAMUSTINE PHOSPHATE AND SULFOALKYL ETHER CYCLODEXTRINS

(57) Abstract: A pharmaceutical formulation which comprises a parenterally acceptable carrier or diluent, estramustine phosphate and a sulfoalkyl ether cyclodextrin. The formulation can be administered according to a combined chemotherapy regimen in association with one or more chemotherapeutic agents. The formulation also enables estramustine phosphate to be administered with no side effects at the site of injection.