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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number
WO 2005/082416 A2

(51) International Patent Classification[7]: A61K 47/00

(21) International Application Number:
PCT/IB2005/000100

(22) International Filing Date: 17 January 2005 (17.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/540,897 30 January 2004 (30.01.2004) US

(71) Applicant *(for all designated States except US)*: **PFIZER PRODUCTS INC.** [US/US]; Eastern Point Road, Groton, CT 06340 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **ADAMI, Roger, Christopher** [US/US]; Pfizer Global Research and Development, Eastern Point Road, Groton, CT 06340 (US). **DAVID, Frederick** [FR/FR]; c/o Pfizer Global Research and Development, Ramsgate Road, Sandwich, Kent CT13 9NJ (GB). **WOOD, Julia, Ann** [US/US]; Pfizer Global Research and Development, Eastern Point Road, Groton, CT 06340 (US).

(74) Agents: **WOOD, David, J.** et al.; Pfizer Research and Development, Ramsgate Road, Sandwich, Kent CT13 9NJ (GB).

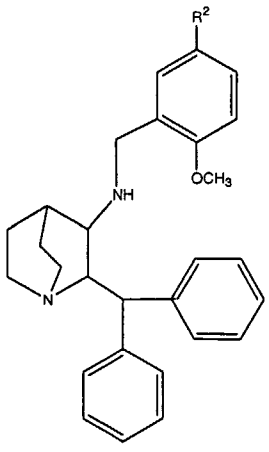
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *without international search report and to be republished upon receipt of that report*

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.

(54) Title: ANTIMICROBIAL PRESERVATIVES TO ACHIEVE MULTI-DOSE FORMULATION USING BETA-CYCLODEXTRINS FOR LIQUID DOSAGE FORMS



(I)

(57) Abstract: The present invention is directed to pharmaceutical compositions containing a therapeutically effective amount of an Active Pharmaceutical Ingredient ("API"), a pharmaceutically acceptable cyclodextrin and a pharmaceutically acceptable preservative. The invention is also directed to pharmaceutical compositions of the compounds of Formula (I) wherein R^2 is selected from the group consisting of methyl, ethyl, isopropyl, sec-butyl and *tert-butyl* and a pharmaceutically acceptable cyclodextrin and preservative. Formula (I): In particular, the invention is directed to pharmaceutical compositions of the compound of Formula la, and a pharmaceutically acceptable cyclodextrin and a preservative.

WO 2005/082416 A2