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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 June 2012 (14.06.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/077968 A2

(51) International Patent Classification:
A61K 31/4422 (2006.01) *A61K 9/16* (2006.01)
A61K 31/41 (2006.01) *A61P 9/00* (2006.01)

(21) International Application Number:
PCT/KR2011/009413

(22) International Filing Date:
7 December 2011 (07.12.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2010-0125804 9 December 2010 (09.12.2010) KR

(71) Applicant *(for all designated States except US)*: **LG LIFE SCIENCES LTD.** [KR/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CHUNG, Young Sik** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **PARK, Soo Ah** [KR/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR). **KIM, Ree Sun** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Sung Il** [KR/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR). **JUHN, Jae Hyeon** [KR/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR). **KIM, Dong Kyu** [US/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR). **KIM, Yoo Rin** [KR/KR]; LG Gwanghwamun Bldg., 92, Sinmunno 2-ga, Jongno-gu, Seoul 110-062 (KR). **PARK, Hee Dong** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **PARK, Seong Jae** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **LEE, Sung Hack** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Ju Hyun** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **JUNG, Min Young** [KR/KR]; R&D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR).

(74) Agent: **CHOI, Kyu Pal**; Halla Classic Building 4F., 824-11, Yeoksam-dong, Kangnam-gu, Seoul 135-080 (KR).

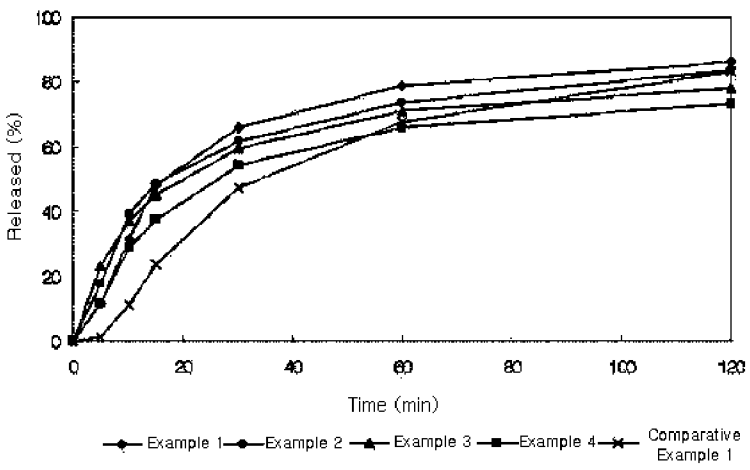
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,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

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,

[Continued on next page]

(54) Title: COMPLEX FORMULATION COMPRISING LERCANIDIPINE HYDROCHLORIDE AND VALSARTAN AND METHOD FOR THE PREPARATION THEREOF

[Fig. 1]



(57) Abstract: The present invention relates to a pharmaceutical composition comprising lercanidipine hydrochloride and valsartan as active components and a method for the preparation thereof. The pharmaceutical composition comprising lercanidipine hydrochloride and valsartan according to the present invention has a superior effect on the prevention and treatment of cardiovascular diseases and their complex diseases, and reduces the adverse effects of each component. In addition, the present composition comprises lercanidipine hydrochloride and valsartan in a separated form so as to increase the dissolution rates of both components and reduce the adverse effects.

WO 2012/077968 A2

UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, 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 (Rule 48.2(g))*