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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 July 2014 (10.07.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/107617 A1

(51) International Patent Classification:
A61K 9/28 (2006.01) *A61K 31/155* (2006.01)

(21) International Application Number:
PCT/US2014/010240

(22) International Filing Date:
3 January 2014 (03.01.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/749,307 5 January 2013 (05.01.2013) US

(71) Applicant: **ELCELYX THERAPEUTICS, INC.** [US/US]; 11995 El Camino Real, Suite 305, San Diego, CA 92130 (US).

(72) Inventors: **BARON, Alain D.**; 12863 Baywind Point, San Diego, CA 92130 (US). **FINEMAN, Mark S.**; 12444 Oakfort Place, San Diego, CA 92131 (US). **KIM, Terri**; 3209 Avenida De Sueno, Carlsbad, CA 92009 (US). **DORDUNOO, Stephen Kwaku**; c/o Kydes Pharmaceutical, LLC, 1450 South Rolling Road, Halethorpe, MD 21227 (US).

(74) Agent: **LORENZ, Todd**; Arnold & Porter LLP, Three Embarcadero Center, 10th Floor, San Francisco, CA 94111 (US).

(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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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.

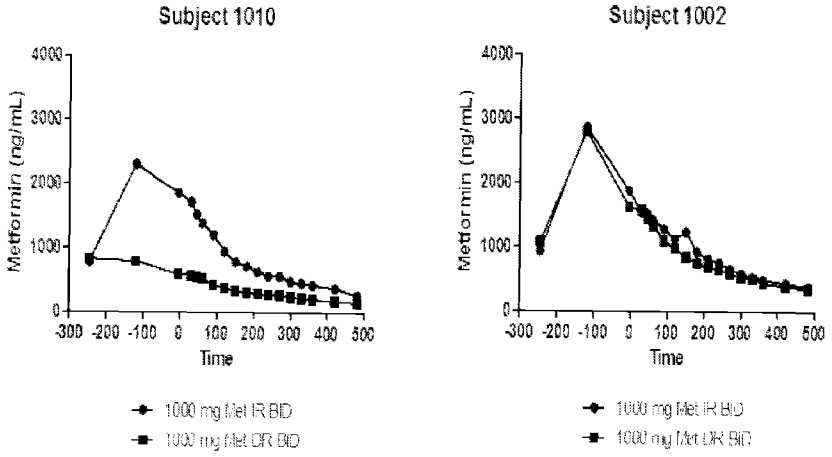
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

(54) Title: DELAYED-RELEASE COMPOSITION COMPRISING BIGUANIDE

FIG. 17



(57) Abstract: Compositions and methods for improving the pharmacokinetics and reducing the risk of adverse events resulting from biguanide compound administration are provided, comprising administering delayed release formulations of such compounds having a lag phase release.

WO 2014/107617 A1