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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
02 February 2023 (02.02.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/009841 A1

(51) International Patent Classification:
A61K 9/20 (2006.01)

(21) International Application Number:
PCT/US2022/038914

(22) International Filing Date:
29 July 2022 (29.07.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/227,915 30 July 2021 (30.07.2021) US

(71) Applicant: **EVECXIA THERAPEUTICS, INC.** [US/US]; 2 Davis Drive, Research Triangle Park, NC 27709 (US).

(72) Inventors: **JACOBSEN, Jacob, Pade, Ramsoe**; 2602 Englewood Avenue, Durham, NC 27705 (US). **BERNER, Bret**; 4011 54 Ave SW, Seattle, WA 98116 (US). **LIN, Wu**; 31 Archer Crescent, Wollaton, Nottingham NG8 1HB (GB). **TAY, Ching, Sieu**; 38 Clumber Avenue, Mapperley, Nottingham NG11 6JS (GB).

(74) Agent: **TAYLOR, Arles, A., Jr.**; Jenkins, Wilson, Taylor & Hunt, P.A., 3015 Carrington Mill Boulevard, Suite 550, Morrisville, NC 27560 (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, ST, 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,

(54) Title: 5-HYDROXYTRYPTOPHAN GASTRORETENTIVE DOSAGE FORMS

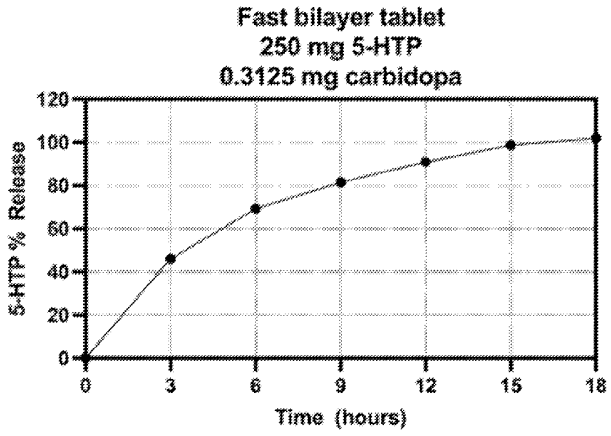


FIG. 1A

(57) Abstract: A gastroretentive, sustained-release dosage form including 5-hydroxytryptophan (5-HTP) as an active ingredient and low-dose carbidopa is described. For example, the dosage form can be provided as a bilayer tablet comprising a swelling layer and a modified release layer, where the 5-HTP and carbidopa are both included in the modified release layer. The dosage form provides for essentially parallel release of the 5-HTP and the carbidopa with, for instance, release of 80% of the 5-HTP and carbidopa at about 5 hours to about 12 hours.

[Continued on next page]

WO 2023/009841 A1

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))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*