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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 May 2022 (27.05.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/109077 A1

(51) International Patent Classification:
A61K 31/416 (2006.01) *A61K 31/47* (2006.01)
A61K 31/435 (2006.01) *A61K 31/551* (2006.01)
A61K 31/445 (2006.01) *A61K 47/26* (2006.01)

(21) International Application Number:
PCT/US2021/059801

(22) International Filing Date:
18 November 2021 (18.11.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/115,789 19 November 2020 (19.11.2020) US
63/126,550 17 December 2020 (17.12.2020) US

(71) Applicant: **BIOHAVEN PHARMACEUTICAL HOLDING COMPANY LTD.** [US/US]; 215 Church Street, New Haven, Connecticut 06510 (US).

(72) Inventors: **CONWAY, Charles M.**; Biohaven Pharmaceutical Holding Company Ltd., 215 Church Street, New Haven, Connecticut 06510 (US). **DUBOWCHIK, Gene M.**; Biohaven Pharmaceutical Holding Company Ltd., 215 Church Street, New Haven, Connecticut 06510 (US). **KUMAR, Rajesh**; Biohaven Pharmaceutical Holding Company Ltd., 215 Church Street, New Haven, Connecticut 06510 (US).

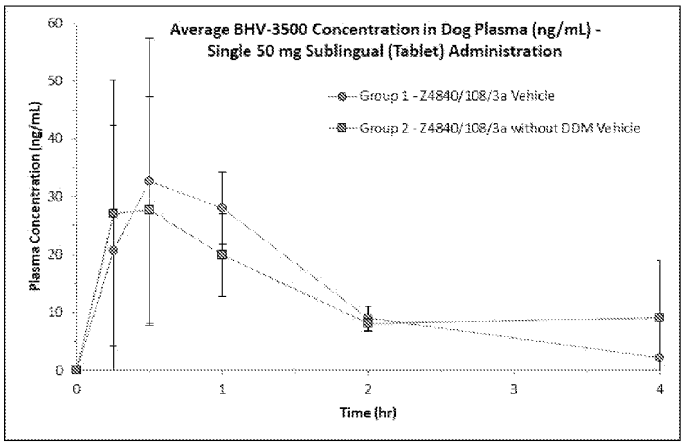
(74) Agent: **ZUEV, Dmitry**; Biohaven Pharmaceutical Holding Company Ltd., 215 Church Street, New Haven, Connecticut 06510 (US).

(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, 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,

(54) Title: COMPOSITIONS FOR IMPROVED DELIVERY OF CGRP INHIBITORS

FIG. 1



(57) Abstract: Provided is a pharmaceutical composition including a calcitonin gene-related peptide (CGRP) inhibitor and an absorption increasing amount of a pharmaceutically acceptable substance, such as a carbohydrate surfactant. Also provided is a method for increasing bioavailability of a calcitonin gene-related peptide (CGRP) inhibitor in a subject, including orally administering to increase the bioavailability of the CGRP inhibitor in the subject.

WO 2022/109077 A1

[Continued on next page]

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).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
— *of inventorship (Rule 4.17(iv))*

Published:

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