

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
12 August 2021 (12.08.2021)



(10) International Publication Number
WO 2021/155841 A1

(51) International Patent Classification:

C07D 471/04 (2006.01) A61K 33/42 (2006.01)
C07F 9/53 (2006.01) A61P 3/10 (2006.01)
A61K 31/437 (2006.01) A61P 3/04 (2006.01)
A61K 31/444 (2006.01) A61P 3/06 (2006.01)
A61K 31/4709 (2006.01) A61P 9/00 (2006.01)
A61K 31/4725 (2006.01)

(21) International Application Number:

PCT/CN2021/075488

(22) International Filing Date:

05 February 2021 (05.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/CN2020/074537

07 February 2020 (07.02.2020) CN

PCT/CN2020/109304

14 August 2020 (14.08.2020) CN

(71) Applicant: **GASHERBRUM BIO, INC.** [US/US]; 2145
Clement St., San Francisco, California 94121 (US).

(72) Inventor; and

(71) Applicant (for SC only): **MENG, Qinghua** [CN/CN]; 5th
Floor, No. 1 South Bldg., 4560 JinKe Rd Zhangjiang Hi-
Tech Park, Shanghai 201210 (CN).

(72) Inventors: **LIN, Xichen**; 5th Floor, No. 1 South Bldg.,
4560 JinKe Rd Zhangjiang Hi-Tech, Park, Shanghai 201210
(CN). **ZHANG, Haizhen**; 5th Floor, No. 1 South Bldg.,
4560 JinKe Rd Zhangjiang Hi-Tech, Park, Shanghai 201210
(CN). **XING, Weiqiang**; 5th Floor, No. 1 South Bldg.,
4560 JinKe Rd Zhangjiang Hi-Tech, Park, Shanghai 201210
(CN). **LEI, Hui**; 5th Floor, No. 1 South Bldg., 4560 JinKe
Rd Zhangjiang Hi-Tech, Park, Shanghai 201210 (CN).
JENNINGS, Andrew; 2145 Clement St., San Francisco,
California 94121 (US).

(74) Agent: **LINDA LIU & PARTNERS**; F16 Tower C, Bei-
jing Global Trade Center, 36 North Third Ring East Road,
Dongcheng District, Beijing 100013 (CN).

(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,

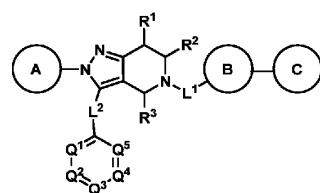
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO,
NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, 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,
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: HETEROCYCLIC GLP-1 AGONISTS



(57) Abstract: This disclosure relates to GLP-1 agonists of Formula (I) : including pharmaceuti-
cally acceptable salts and solvates thereof, and pharmaceutical compositions including the same.

WO 2021/155841 A1