

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
01 September 2022 (01.09.2022)



(10) International Publication Number
WO 2022/182985 A1

(51) International Patent Classification:

A61K 38/45 (2006.01) *G01N 33/00* (2006.01)

A61P 1/16 (2006.01)

(21) International Application Number:

PCT/US2022/017899

(22) International Filing Date:

25 February 2022 (25.02.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/154,693 27 February 2021 (27.02.2021) US

(71) Applicant: **REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

(72) Inventors: **LOTTA, Luca Andrea**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **VERWEIJ, Nick**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **O'DUSHLAINE, Colm**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **MARCHINI, Jonathan**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US). **BARAS, Aris**; 777 Old Saw Mill River Road, Tarrytown, New York 10591 (US).

(74) Agent: **LEGAARD, Paul K.**; Stradley Ronon Stevens & Young, LLP, 30 Valley Stream Parkway, Malvern, Pennsylvania 19355-1481 (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, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: TREATMENT OF LIVER DISEASE WITH MITOCHONDRIAL GLYCEROL-3-PHOSPHATE ACYLTRANSFERASE (GPAM) INHIBITORS

(57) Abstract: The present disclosure provides methods of treating subjects having liver disease, and methods of identifying subjects having an increased risk of developing liver disease.

