

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
07 July 2022 (07.07.2022)



(10) International Publication Number
WO 2022/146947 A1

(51) International Patent Classification:

A61K 9/00 (2006.01) A61K 47/20 (2006.01)
A61K 38/47 (2006.01) A61K 47/26 (2006.01)
A61K 39/395 (2006.01) A61P 31/00 (2006.01)
A61K 47/18 (2017.01) A61P 35/00 (2006.01)

(21) International Application Number:

PCT/US2021/065254

(22) International Filing Date:

27 December 2021 (27.12.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/131,234 28 December 2020 (28.12.2020) US
63/131,244 28 December 2020 (28.12.2020) US
63/150,465 17 February 2021 (17.02.2021) US

(71) Applicants: BRISTOL-MYERS SQUIBB COMPANY

[US/US]; Route 206 and Province Line Road, Princeton, NJ 08543 (US). HALOZYME THERAPEUTICS, INC. [US/US]; 11388 Sorrento Valley Road, San Diego, CA 92121 (US).

(72) Inventors: HUANG, Masano; Route 206 and Province

Line Road, Princeton, NJ 08543 (US). KHOSSRAVI, Mehrnaz; Route 206 and Province Line Road, Princeton, NJ 08543 (US). HABY, Thomas, Arthur; 11 Eckert Drive, Lincroft, NJ 07738 (US). HART, Scott, Aaron; Route 206 and Province Line Road, Princeton, NJ 08543 (US). MANTRI, Rao, Venkatramana; Route 206 and Province Line Road, Princeton, NJ 08543 (US). VEZINA, Heather, Elizabeth; Route 206 and Province Line Road, Princeton, NJ 08543 (US). ROY, Amit; Route 206 and Province Line Road, Princeton, NJ 08543 (US). MURTHY, Bindu, Purnima; Route 206 and Province Line Road, Princeton, NJ 08543 (US). ARAS, Urvi, Ashish; Route 206 and Province Line Road, Princeton, NJ 08543 (US). SANGHAVI, Kinjal; Route 206 and Province Line Road, Princeton, NJ 08543 (US). ZHAO, Xiaochen; Route 206 and Province Line Road, Princeton, NJ 08543 (US). BELLO, Akin-tunde; Route 206 and Province Line Road, Princeton, NJ 08543 (US).

(74) Agent: KIM, Ji Eun et al.; Sterne, Kessler, Goldstein &

Fox P.L.L.C., 1100 New York Avenue, NW, Washington, DC 20005 (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, 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))
- 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))
- with sequence listing part of description (Rule 5.2(a))



WO 2022/146947 A1

(54) Title: ANTIBODY COMPOSITIONS AND METHODS OF USE THEREOF

(57) Abstract: The disclosure provides pharmaceutical compositions comprising an antibody and at least two antioxidants. In some aspects, pharmaceutical composition is formulated for subcutaneous delivery. In some aspects, the pharmaceutical composition further comprises an endoglycosidase hydrolase enzyme. Other aspects of the present disclosure are directed to methods of subcutaneously delivering the pharmaceutical composition.