

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 July 2023 (13.07.2023)



(10) International Publication Number
WO 2023/133476 A1

(51) International Patent Classification:

A61K 31/4418 (2006.01) A61P 29/00 (2006.01)
A61K 31/4412 (2006.01)

(21) International Application Number:

PCT/US2023/060185

(22) International Filing Date:

05 January 2023 (05.01.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/296,818	05 January 2022 (05.01.2022)	US
63/296,826	05 January 2022 (05.01.2022)	US
63/296,843	05 January 2022 (05.01.2022)	US
63/326,129	31 March 2022 (31.03.2022)	US
63/326,132	31 March 2022 (31.03.2022)	US
63/341,269	12 May 2022 (12.05.2022)	US
63/341,279	12 May 2022 (12.05.2022)	US
63/341,281	12 May 2022 (12.05.2022)	US
63/341,828	13 May 2022 (13.05.2022)	US
63/352,107	14 June 2022 (14.06.2022)	US
63/356,653	29 June 2022 (29.06.2022)	US
63/374,362	01 September 2022 (01.09.2022)	US
63/403,481	02 September 2022 (02.09.2022)	US
63/431,530	09 December 2022 (09.12.2022)	US
63/432,208	13 December 2022 (13.12.2022)	US

(71) Applicant: PURETECH LYT 100, INC. [US/US]; 6 Tide Street, Boston, Massachusetts 02210 (US).

(72) Inventors: CHEN, Michael C.; 223 Winslow Avenue, Norwood, Massachusetts 02062 (US). ELENKO, Eric; 1

Franklin Street, #1903, Boston, Massachusetts 02110 (US). PADEN, Heather A.; 20 Mountain Road, Woodbury, Connecticut 06798 (US). KORTH, Christopher C.; 24 Tehias Street, Rye, New Hampshire 03870 (US). FORD, Paul Andrew; 29 Iden Hurst, Hurstpierpoint Sussex BN6 9XZ (GB). KROP, Julie S.; 201 West Brookline Street, Apt 102, Boston, Massachusetts 02118 (US). GRAHAM, Camilla S.; 36 Salmi Road, Framingham, Massachusetts 01701 (US). MICIONI, Liza C.; 1631 Dubac Road, Wall Township, New Jersey 07719 (US). HATCH, Simon John; 114 Walnut Avenue, #3, Wayne, Pennsylvania 19087 (US). GARG, Varun; 23 Ledgewood Road, Framingham, Massachusetts 01701 (US).

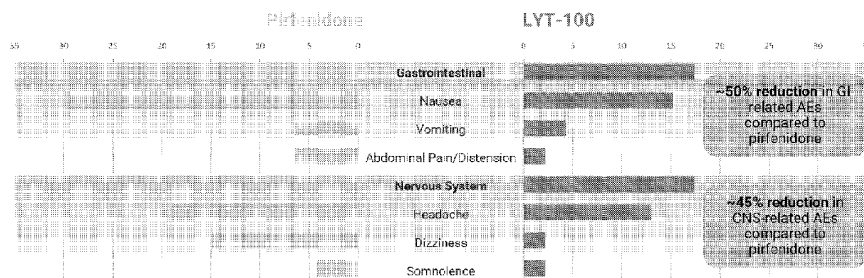
(74) Agent: BREINING, Scott et al.; Womble Bond Dickinson (US) LLP, Independence Wharf, 470 Atlantic Avenue, Suite 600, Boston, Massachusetts 02210 (US).

(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, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,

(54) Title: METHODS OF TREATING IDIOPATHIC PULMONARY FIBROSIS WITH DEUPIRFENIDONE

FIG. 7



(57) Abstract: Disclosed herein is a method of treating Idiopathic Pulmonary Fibrosis (IPF). The method includes administering to a subject in need thereof the deuterium-enriched pifrenidone LYT-100 at a total daily dose from about 1650 mg to about 2500 mg.

[Continued on next page]

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, ME, 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))*