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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 October 2022 (27.10.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/226011 A1

(51) International Patent Classification:
A61K 31/5377 (2006.01) *A61P 35/02* (2006.01)
A61K 39/395 (2006.01)

(21) International Application Number:
PCT/US2022/025460

(22) International Filing Date:
20 April 2022 (20.04.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/177,616 21 April 2021 (21.04.2021) US

(71) Applicants: **CELGENE CORPORATION** [US/US]; 86 Morris Avenue, Summit, NJ 07901 (US). **BRISTOL-MYERS SQUIBB COMPANY** [US/US]; Route 206 And Province Line Road, Princeton, NJ 08543 (US).

(72) Inventors: **BUCHHOLZ, Tonia, J.**; c/o Celgene Corporation, 1500 Owens Street, Suite 600, San Francisco, CA 94158 (US). **POURDEHNAD, Michael**; c/o Celgene Corporation, 1500 Owens Street, Suite 600, San Francisco, CA 94158 (US). **PATAH, Poliana, Alves**; Bristol-Myers Squibb Company, 3401 Princeton Pike, Lawrenceville, NJ 08648 (US). **WU, Fan**; Celgene Corporation, 86 Morris Avenue, Summit, NJ 07901 (US).

(74) Agent: **BRUNER, Michael, J.** et al.; Jones Day, 250 Vesey Street, New York, NY 10281-1047 (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).

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))*

(54) **Title:** METHODS OF TREATING NON-HODGKIN LYMPHOMA USING 2-(2,6-DIOXOPIPERIDIN-3YL)-4-(2-FLUORO-4-((3-MORPHOLINOAZETIDIN-1-YL)METHYL)BENZYL)AMINO)ISOINDOLINE-1,3-DIONE

(57) **Abstract:** Provided herein are methods of using (S)-2-(2,6-dioxopiperidin-3-yl)-4-((2-fluoro-4-((3- morpholinoazetidin-1-yl)methyl)benzyl)amino)isoindoline-1, 3-dione, or an enantiomer, a mixture of enantiomers, a tautomer, an isotopolog, or a pharmaceutically acceptable salt thereof, in combination with tafasitamab, obinutuzumab, or tazemetostat, for treating, preventing or managing non-Hodgkin lymphoma.

WO 2022/226011 A1