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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
07 October 2021 (07.10.2021)

WIPO | PCT

(10) International Publication Number
WO 2021/202936 A9

(51) International Patent Classification:
A61K 31/167 (2006.01) *A61P 35/00* (2006.01)
A61K 31/415 (2006.01)

(21) International Application Number:
PCT/US2021/025468

(22) International Filing Date:
01 April 2021 (01.04.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/004,474 02 April 2020 (02.04.2020) US

(71) Applicant: **UNIVERSITY OF TENNESSEE RESEARCH FOUNDATION** [US/US]; 211 Conference Center Building, 600 Henley Street, Knoxville, Tennessee 37996 (US).

(72) Inventors: **NARAYANAN, Ramesh**; 487 Herring Lane, Cordova, Tennessee 38018 (US). **MILLER, Duane D.**; 1646 Forsythe Trail, Collierville, Tennessee 38017 (US). **HE, Yali**; 2072 Duntreath Meadows, Germantown, Tennessee 38139 (US). **PONNUSAMY, Thamarai**; 5370 East Maxima Cove, Memphis, Tennessee 38120 (US). **HWANG, Dong-Jin**; 5162 Jon Oak Drive, Arlington, Tennessee 38002 (US).

(74) Agent: **COHEN, Mark S.** et al.; Pearl Cohen Zedek Latzer Baratz LLP, Times Square Tower, 7 Times Square, 19th Floor, New York, NY 10036 (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,

(54) Title: PYRAZOLYLPROPANAMIDE COMPOUNDS AND USES THEREOF FOR TREATMENT OF PROSTATE CANCER

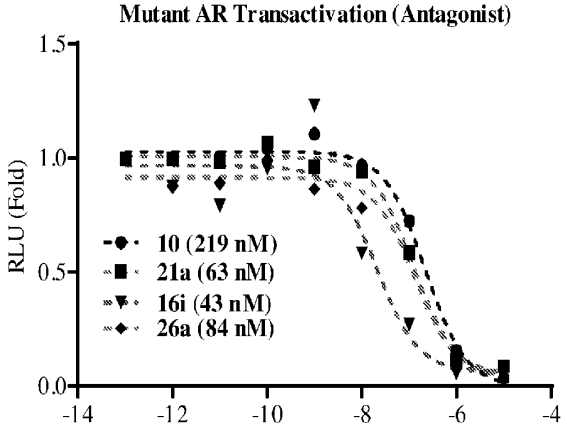


Figure 1

(57) Abstract: This invention relates to pyrazolylpropanamide compounds and uses thereof for treatment of prostate cancer, advanced prostate cancer, refractory prostate cancer, AR overexpressing prostate cancer, castration-resistant prostate cancer, castration-sensitive prostate cancer, AR-V7 expressing prostate cancer, or d567ES expressing prostate cancer, darolutamide resistant prostate cancer, enzalutamide resistant prostate cancer, apalutamide resistant prostate cancer, or abiraterone resistant prostate cancer.

WO 2021/202936 A9

[Continued on next page]

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))*

(48) Date of publication of this corrected version:
06 January 2022 (06.01.2022)

(15) Information about Correction:
see Notice of 06 January 2022 (06.01.2022)