

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 January 2011 (06.01.2011)

(10) International Publication Number
WO 2011/002817 A1

PCT

(51) International Patent Classification:
A61K 31/497 (2006.01)

(21) International Application Number:
PCT/US2010/040486

(22) International Filing Date:
29 June 2010 (29.06.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/221,430 29 June 2009 (29.06.2009) US
61/292,360 5 January 2010 (05.01.2010) US

(71) Applicant (for all designated States except US): **AGIOS PHARMACEUTICALS, INC.** [US/US]; 38 Sidney Street, Cambridge, MA 02139 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SAUNDERS, Jeffrey, O.** [US/US]; 117 Seymour Street, Concord, MA 01742 (US). **SALITURO, Francesco, G.** [US/US]; 25 Baker Drive, Marlborough, MA 01752 (US). **YAN, Shunqi** [US/US]; 55 Stepping Stone, Irvine, CA 92603 (US).

(74) Agent: **MCCARTY, Catherine, M.**; Lando & Anastasi, LLP, One Main Street, Eleventh Floor, Cambridge, MA 02142 (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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))

(54) Title: THERAPEUTIC COMPOUNDS AND COMPOSITIONS

(57) Abstract: Compounds and compositions comprising compounds that modulate pyruvate kinase M2 (PKM2) are described herein. Also described herein are methods of using the compounds that modulate PKM2 in the treatment of cancer.



WO 2011/002817 A1