

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 August 2019 (08.08.2019)



(10) International Publication Number
WO 2019/152863 A1

(51) International Patent Classification:
C07D 471/04 (2006.01) A61P 11/00 (2006.01)
A61K 31/437 (2006.01)

(21) International Application Number:
PCT/US2019/016386

(22) International Filing Date:
01 February 2019 (01.02.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/CN2018/075023
02 February 2018 (02.02.2018) CN

(71) Applicant: GENENTECH, INC. [US/US]; 1 DNA Way,
South San Francisco, CA 94080 (US).

(72) Inventors: NAGAPUDI, Karthik; c/o Genentech, Inc., 1
DNA Way, South San Francisco, CA 94080 (US). LIU,
Yuan; c/o Crystal Pharmatech, 707 Alexander Road, Suite
208, Princeton, NJ 08540 (US). WANG, Shuai; c/o Crystal
Pharmatech, 707 Alexander Road, Suite 208, Princeton,
NJ 08540 (US). ZHANG, Wei; c/o Genentech, Inc.,
1 DNA Way, South San Francisco, CA 94080-4990 (US).
BLATTER, Fritz; c/o Solvias AG, Klybeckstrasse 191 PO
Box, 4002 Basel (CH). SASTRY, Srikonda; Intermune,
Inc. c/o Genentech, Inc., 1 DNA Way, South San Francisco,
CA 94080-4990 (US). LEUNG, Manshiu; Intermune,
Inc. c/o Genentech, Inc., 1 DNA Way, South San Francisco,
CA 94080-4990 (US). RADHAKRISHNAN, Ramachandran;
Intermune, Inc. c/o Genentech, Inc., 1 DNA Way,
South San Francisco, CA 94080-4990 (US). TANDALE,
Rajendra, S.; c/o Formurex, Inc., 2470 North Wilcox Road,
Stockton, CA 95215 (US). PILSL, Ludwig; c/o DSM
Pharma Chemicals North America, 45 Waterview Boulevard,
Parsippany, NJ 07054 (US). MULLER, Roland;
c/o DSM Pharma Chemicals North America, 45 Waterview
Boulevard, Parsippany, NJ 07054 (US). FRIESER,
Markus; c/o DSM Pharma Chemicals North America, 45
Waterview Boulevard, Parsippany, NJ 07054 (US). CZA-
UDERNA, Christine; c/o DSM Pharma Chemicals North
America, 45 Waterview Boulevard, Parsippany, NJ 07054

(US). FISHER, Lawrence Emerson; c/o Genentech, Inc.,
1 DNA Way, South San Francisco, CA 94080-4990 (US).

(74) Agent: VOELKER, Alden E.; Marshall, Gerstein & Borun
LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, IL
60606-6357 (US).

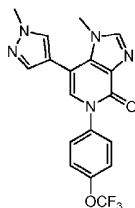
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, 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, 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, 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: PHARMACEUTICAL COMPOUND, SALTS THEREOF, FORMULATIONS THEREOF, AND METHODS OF
MAKING AND USING SAME



I

(57) Abstract: Salts, hydrates and solvates of Compound I and meth-
ods of making and using the same and related dosage forms thereof
are disclosed.



WO 2019/152863 A1