

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
16 July 2020 (16.07.2020)



(10) International Publication Number
WO 2020/143762 A1

(51) International Patent Classification:

C07C 255/20 (2006.01) A61P 25/24 (2006.01)
A61K 31/135 (2006.01)

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).

(21) International Application Number:

PCT/CN2020/071404

Published:

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

(22) International Filing Date:

10 January 2020 (10.01.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/791,058 11 January 2019 (11.01.2019) US
62/871,763 09 July 2019 (09.07.2019) US

(71) Applicant: **ALAR PHARMACEUTICALS INC.**

[CN/CN]; Rm. 312, 3F., No. 19, Keyuan Rd., Xitun Dist.,
Taichung City, Taiwan 40763 (CN).

(72) Inventors: **LIN, Tong-Ho**; Rm. 312, 3F., No. 19, Keyuan

Rd., Xitun Dist., Taichung City, Taiwan 40763 (CN). **WEN,
Yung-Shun**; Rm. 312, 3F., No. 19, Keyuan Rd., Xitun Dist.,
Taichung City, Taiwan 40763 (CN). **CHEN, Chia-Hsien**;
Rm. 312, 3F., No. 19, Keyuan Rd., Xitun Dist., Taichung
City, Taiwan 40763 (CN). **CHANG, Wei-Ju**; Rm. 312, 3F.,
No. 19, Keyuan Rd., Xitun Dist., Taichung City, Taiwan
40763 (CN).

(74) Agent: **GE CHENG & CO., LTD.**; CHENG, David W.,

Level 19, Tower E3, The Towers, Oriental Plaza, No. 1, East
Chang An Avenue, Dongcheng District, Beijing, 100738
(CN).

(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, 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,

(54) Title: KETAMINE PAMOATE AND USE THEREOF

(57) Abstract: Provided are pamoate salts of ketamine having a stoichiometry of 2: 1 of ketamine to pamoate, including R, S-ketamine pamoate, S-ketamine pamoate, or R-ketamine pamoate, and crystalline or amorphous forms of the pamoate salts, and having excellent safety and properties for pharmaceutical applications. Also provided are pharmaceutical compositions including the pamoate salts of ketamine and their uses in treating a CNS disease or serving as an anesthetic.



WO 2020/143762 A1