

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 April 2021 (08.04.2021)



(10) International Publication Number
WO 2021/066922 A1

(51) International Patent Classification:

A61K 31/5415 (2006.01) C07D 417/04 (2006.01)
A61P 31/12 (2006.01)

(21) International Application Number:

PCT/US2020/042264

(22) International Filing Date:

16 July 2020 (16.07.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/910,712	04 October 2019 (04.10.2019)	US
62/959,230	10 January 2020 (10.01.2020)	US
63/038,234	12 June 2020 (12.06.2020)	US

(71) Applicant: ENANTA PHARMACEUTICALS, INC.

[US/US]; 500 Arsenal Street, Watertown, MA 02472 (US).

(72) Inventors: SZYMANKIAK, Adam; 1335 Boylston St, Apt

609, Boston, MA 02215 (US). McGRATH, Kevin; 8 Glen-
coe Street, Apt 6, Brighton, MA 02135 (US). YU, Jian-
ming; 100 Marion Drive, Plainsboro, NJ 08536 (US).
MANN, Tyler; 12 Bostonia Ave, Brighton, MA 02135
(US). NGUYEN, Long; 31 Peterborough St. #19, Boston,
MA 02215 (US). ZHU, Kaicheng; 9 Cherry Street, Unit
2, Belmont, MA 02478 (US). KIM, In, Jong; 20 Phin-
ney Road, Lexington, MA 02421 (US). OR, Yat, Sun; 29
Michaelchris Drive, Waltham, MA 02452 (US).

(74) Agent: HARLAN, Edgar, W.; Elmore Patent Law Group,

P.C., 484 Groton Road, Westford, MA 01886 (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.

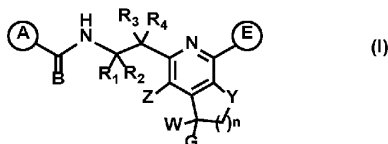
(84) Designated States (unless otherwise indicated, for every

kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
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))

(54) Title: ANTIVIRAL HETEROCYCLIC COMPOUNDS



(57) Abstract: The present invention discloses compounds of Formula (I), or pharmaceutically acceptable salts, esters, or prodrugs thereof, which inhibit Human Respiratory Syncytial Virus (HRSV) or Human Metapneumovirus (HMPV) inhibitors. The present invention further relates to pharmaceutical compositions comprising the aforementioned compounds for administration to a subject suffering from HRSV or HMPV infection. The invention also relates to methods of treating an HRSV or HMPV infection in a subject by administering a pharmaceutical composition comprising the compounds of the present invention.



WO 2021/066922 A1